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LONG RANGE PLANNING SYSTEM/WORKLOAD GRAPH INTERFACE PROGRAMS.(U)
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LONG RANGE PLANNING SYSTEM/WORKLOAD GRAPH INTERFACE PROGRAMS

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RESEARCH AND DEVELOPMENT CENTER**

Bethesda, Md. 20084



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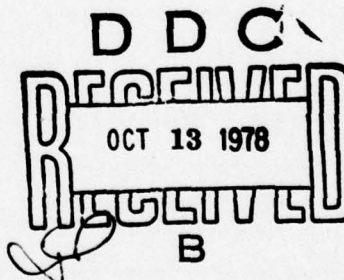
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6 LONG RANGE PLANNING SYSTEM/WORKLOAD GRAPH
INTERFACE PROGRAMS,

by

10 Linda L. Lamatrice

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Computation, Mathematics and Logistics Department

Departmental Report

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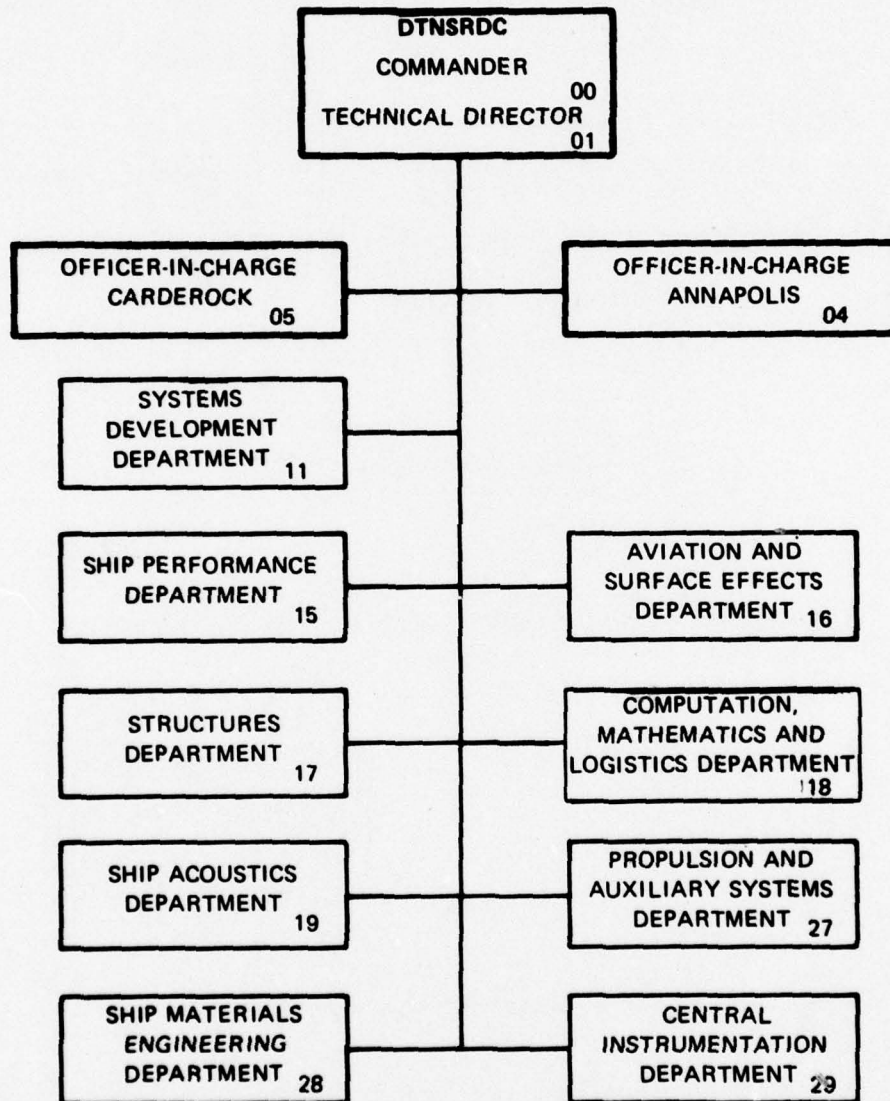
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TABLE OF CONTENTS

	Page
LIST OF FIGURES	iv
ABSTRACT	1
INTRODUCTION	3
PROGRAM LRPSCF	5
DESCRIPTION	5
RUN SET-UP.	6
INPUT/OUTPUT.	8
LISTING OF PROGRAM.	28
SAMPLE RUN.	32
PROGRAM PRCOF.	37
DESCRIPTION	37
RUN SET-UP.	37
INPUT/OUTPUT.	38
LISTING OF PROGRAM.	42
SAMPLE RUN.	44
PROGRAM UPCOF.	49
DESCRIPTION	49
RUN SET-UPS	51
INPUT/OUTPUT.	52
LISTING OF PROGRAM.	60
SAMPLE RUN.	67
PROGRAM UPRUN.	71
DESCRIPTION	71
RUN SET-UPS	73
INPUT/OUTPUT.	74
LISTING OF PROGRAM.	84
SAMPLE RUN.	91

LIST OF FIGURES

	Page
1 - Hierarchical Diagram of the LRPSCF Program	6
2 - Hierarchical Diagram of the UPCOF Program.	50
3 - Hierarchical Diagram of the UPRUN Program.	72

ABSTRACT

This report describes a mini-system of four computer programs which form the interface between two existing systems of the Naval Sea Systems Command. The mini-system provides a means of producing workload summary graphs from the shipyard overhaul schedule of the Long Range Planning System. The programs are written in FORTRAN IV and are capable of running on either the IBM 360/370 or the CDC 6000 series computers.

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INTRODUCTION

A mini-system consisting of four programs was developed by the David W. Taylor Naval Ship R&D Center (DTNSRDC) Code 187 as an interface between files by the Depot Maintenance and Long Range Planning Branch (SEA 0712) of the Naval Sea Systems Command and graph-producing programs of the Workload and Overhaul Scheduling Branch (SEA 0711). The system was developed in response to a request by SEA 0712 for a means of using the Long Range Planning System (LRPS) schedule of availabilities to obtain the workload summary graphs produced by programs of SEA 0711's Short Range System.

One of the programs of the interface (LRPSCF) extracts information from the LRPS Assignment Files for a selected time period and for specified sectors (i.e., groups of shipyards by geographical location and yard ownership). It prepares output files containing the extracted information. One of the output files is in the format of the Common Overhaul File (COF). This file may then be input into the workload summary graph programs which display the monthly manpower requirements by shipyard and provide a Graph chart of the shipyard's availabilities. The other files created by LRPSCF are in the format of the LRPS Run Files. As many as four such files may be created - one for each sector specified by the user. The type select and priority fields are set equal to "1" for all availabilities on the files.

A second program, PRCOF, prints the Common Overhaul File in a readable format with column headings. In addition, it re-computes the fiscal year of the availability start date and re-numbers the records sequentially. To facilitate use, the file is sorted (prior to PRCOF) by ship type, hull number, and sequence number.

The third program, UPCOF, is used to update the COF. The updating may involve changes to existing records on the file, deletions of records from the file, or additions of new records to the file. Only one card is required to completely define each update operation. The card indicates the nature of the update (add, delete, or change), the record to be updated (for changes or deletions), and the parameters to be updated (for changes or additions). Specification of the record is by ship type, hull

number, and sequence number. New records (i.e., additions to the file) are input to the UPCOF program in the format of the LRPS Run File records.

The cards which indicate changes to be made to existing COF records are also punched in the Run File format. In this case, the user need only specify the particular fields he wishes to change; all other fields will remain as they were on the COF.

Output of the UPCOF program is a detailed account of the update operations performed, and an indication of any errors encountered in the update deck. When the user is satisfied with the updating performed by UPCOF, the PRCOF program and its sort routine should be run to recompute the fiscal year, renumber the records, and print the revised file.

The revised COF may then be re-run through the workload summary graph programs and, if necessary, the entire updating process may be repeated until the user is satisfied with the workload curves. At this point, the cards used to update the COF may be input to the fourth program documented in this report - the UPRUN program - to update the Run Files created by the LRPSCF program. The updated Run Files may then be input to NAVSEA's SCHED program to produce revised Assignment Files. Since type select was pre-set to "1" (by LRPSCF) for all availabilities on the Run Files, SCHED will not change the Run File yard assignments (unless the yard's dry dock or manpower constraints would be violated by the assignment).

PROGRAM LRPSCF

DESCRIPTION

The program LRPSCF extracts records from the Long Range Planning System (LRPS) Assignment Files and prepares output files in the formats of the LRPS Run Files and the Common Overhaul File (COF). Card input to the program specifies the "extraction period" dates. Any availabilities on the LRPS Assignment Files which overlap with the extraction period are included on the Run Files and the COF. An additional input specifies the sector(s) (NE, NW, PE, or PW) from which data are to be extracted from the Assignment Files. It is possible to process only one sector at a time, or to process any of the following combinations of sectors:

- East coast sectors (NE and PE)
- West coast sectors (NW AND PW)
- Navy yards (NE and NW)
- Private yards (PE and PW)
- All sectors (NE, NW, PE, and PW)

LRPSCF creates one Run File for each sector requested by the user. Only one COF, however, is created. It contains the availabilities from all the requested sectors.

LRPSCF discards any records for availabilities not within the extraction period, discards all but the lead record for each availability, converts the LRPS relative dates to Gregorian dates, converts the shipyard designation from numeric to alphabetic, and computes repair mandays from the percent alterations figure. In creating the Run Files, LRPSCF pre-sets the values for the type select and priority fields to "1" for each availability.

Figure 1 presents the hierarchical diagram of the LRPSCF program.

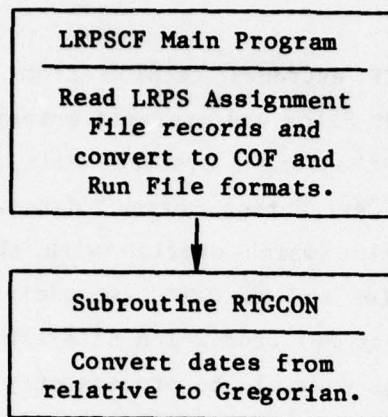


Figure 1 - Hierarchical Diagram of the LRPSCF Program

RUN SET-UP

The following set-up is used to run the LRPSCF program on the IBM 360/370 computer:

```

//NVSLRCF JOB (XXXXXXXXXX,XXXXX),USER,CLASS=C,TIME=(,10),MSGLEVEL=1
//JOB LIB DD DSN=NVS01.MISC.LIB,DISP=SHR

// EXEC PGM=LRPSCF                                (EXECUTE PROGRAM LRPSCF)
//GO.FT05F001 DD *                                (CARD INPUTS)

LRPSCF CARD INPUTS

//GO.FT06F001 DD SYSOUT=A                          (PRINTED OUTPUT)
//GO.FT01F001 DD DSN={LRPS ASSIGNMENT FILE - NE},DISP=SHR (INPUT FILE)
//GO.FT02F001 DD DSN={LRPS ASSIGNMENT FILE - NW},DISP=SHR (INPUT FILE)
//GO.FT03F001 DD DSN={LRPS ASSIGNMENT FILE - PE},DISP=SHR (INPUT FILE)
//GO.FT04F001 DD DSN={LRPS ASSIGNMENT FILE - PW},DISP=SHR (INPUT FILE)
//GO.FT07F001 DD DSN={COMMON OVERHAUL FILE},DISP=SHR      (OUTPUT FILE)
//GO.FT11F001 DD DSN=&&NERF,DISP=(,PASS),UNIT=SYSDA,        (OUTPUT FILE)
// SPACE=(840,200),DCB=(LRECL=84,RECFM=FB,BLKSIZE=840)
//GO.FT12F001 DD DSN=&&NWRP,DISP=(,PASS),UNIT=SYSDA,        (OUTPUT FILE)
// SPACE=(840,200),DCB=(LRECL=84,RECFM=FB,BLKSIZE=840)
//GO.FT13F001 DD DSN=&&PERF,DISP=(,PASS),UNIT=SYSDA,        (OUTPUT FILE)
// SPACE=(840,150),DCB=(LRECL=84,RECFM=FB,BLKSIZE=840)
//GO.FT14F001 DD DSN=&&PWRP,DISP=(,PASS),UNIT=SYSDA,        (OUTPUT FILE)
// SPACE=(840,150),DCB=(LRECL=84,RECFM=FB,BLKSIZE=840)
  
```

```

// EXEC SDA (SORT NE RUN FILE)
//SORTIN DD DSN=&&NERF,DISP=(OLD,DELETE)
//SORTOUT DD DSN={NE RUN FILE},DISP=SHR
//SYSIN DD * (SORT BY SECTOR, SHIP, AND SEQUENCE NUMBER)
SORT FIELDS=(73,2,A,1,9,A,33,4,A),FORMAT=CH

// EXEC PGM=IEBGENER (PRINT NE RUN FILE)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN={NE RUN FILE},DISP=SHR
//SYSUT2 DD SYSOUT=A,DCB=BLKSIZE=134

// EXEC SDA (SORT NW RUN FILE)
//SORTIN DD DSN=&&NWRP,DISP=(OLD,DELETE)
//SORTOUT DD DSN={NW RUN FILE},DISP=SHR
//SYSIN DD * (SORT BY SECTOR, SHIP, AND SEQUENCE NUMBER)
SORT FIELDS=(73,2,A,1,9,A,33,4,A),FORMAT=CH

// EXEC PGM=IEBGENER (PRINT NW RUN FILE)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN={NW RUN FILE},DISP=SHR
//SYSUT2 DD SYSOUT=A,DCB=BLKSIZE=134

// EXEC SDA (SORT PE RUN FILE)
//SORTIN DD DSN=&&PERF,DISP=(OLD,DELETE)
//SORTOUT DD DSN={PE RUN FILE},DISP=SHR
//SYSIN DD * (SORT BY SECTOR, SHIP, AND SEQUENCE NUMBER)
SORT FIELDS=(73,2,A,1,9,A,33,4,A),FORMAT=CH

// EXEC PGM=IEBGENER (PRINT PE RUN FILE)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN={PE RUN FILE},DISP=SHR
//SYSUT2 DD SYSOUT=A,DCB=BLKSIZE=134

// EXEC SDA (SORT PW RUN FILE)
//SORTIN DD DSN=&&PWRP,DISP=(OLD,DELETE)
//SORTOUT DD DSN={PW RUN FILE},DISP=SHR
//SYSIN DD * (SORT BY SECTOR, SHIP, AND SEQUENCE NUMBER)
SORT FIELDS=(73,2,A,1,9,A,33,4,A),FORMAT=CH

// EXEC PGM=IEBGENER (PRINT PW RUN FILE)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN={PW RUN FILE},DISP=SHR
//SYSUT2 DD SYSOUT=A,DCB=BLKSIZE=134

```

INPUT/OUTPUT

The following units are used by the LRPSCF program:

- Unit 1 - Input - LRPS Assignment File, NE
- Unit 2 - Input - LRPS Assignment File, NW
- Unit 3 - Input - LRPS Assignment File, PE
- Unit 4 - Input - LRPS Assignment File, PW
- Unit 5 - Input - Card inputs which specify the run date,
extraction period, and desired sectors
- Unit 6 - Output - List of LRPS Assignment files processed
- Unit 7 - Output - Common Overhaul File
- Unit 11- Output - LRPS Run File, NE
- Unit 12- Output - LRPS Run File, NW
- Unit 13- Output - LRPS Run File, PE
- Unit 14- Output - LRPS Run File, PW

An example of the unit 6 printout is given on page 32.

"LRPSCF" CARD INPUT

(Unit 5)

Identification Card (one card)

CARD COLUMN	FORMAT	FIELD CONTENTS	
1	I2	Month	Run date
3	"/"		
	I2	Day	
6	"/"		
8	I2	Year	
	1X		
10	A1	"N" (Navy); "P" (private); or "B" (both) Coast indicator ("E", "W", or "B")	
11	A1		
	2X		
14			
.	.	.	.
.	A18	Run File name	.
.	.	.	.
31			
32			
	I4	File number	NE Run File
35			
36			
	A3	File version	
38			
39			
	I4	File number	NW Run File
42			
43			
	A3	File version	
45			

Identification Card (continued)

CARD COLUMN	FORMAT	FIELD CONTENTS	
46	I4	File number	PE Run File
49			
50			
52	A3	File version	
53			
56	I4	File number	PW Run File
57			
59			

Extraction Period (one card)

CARD		FIELD CONTENTS	
COLUMN	FORMAT		
1	"E"		
	"X"		
	"T"		
	"R"		
	"A"		
	"C"		
	"I"		
	"I"		
	"O"		
	"N"		
	"P"		
	"E"		
	"R"		
	"I"		
	"O"		
	"D"		
	": "		
19			
20	I2	Month	Start date of extraction period
22	"/"		
	I2	Day	
25	"/"		
	I2	Year	
27			
29	"_"		
31	I2	Month	End date of extraction period
33	"/"		
	I2	Day	
36	"/"		
	I2	Year	
38			

LRPS ASSIGNMENT FILES

(One file for each sector: Units 1-4 - "LRPSCF" Input)

Header Records (four records)

First Header Record

RECORD POS.	FORMAT	FIELD CONTENTS	
1	"0"		
	"0"		
	"0"		
4	"1"		
5			
.		.	.
.	16X	.	.
.		.	.
20			
21			
	A5	Shipyards	
25			
	1X		
27			
	A5	Shipyards	
31			
	1X		
33			
.	.	.	.
.	.	.	.
.	.	.	.
73			
	1X		
75			
	A5	Shipyards	
79			

List of valid shipyards
(max of 10)

Second and Third Header Records

RECORD		FIELD CONTENTS	
POS.	FORMAT		
1	"0"		
	"0"		
	"0"		
4	I1	Header record number ("2" or "3")	
5			
.		.	.
.	16X	.	.
.		.	.
20			
21			
22	I2	Fiscal year	List of valid fiscal years and semi-annual periods (up to 10 per record)
	"_"		
24		Semi-annual period	
25	A2	("I" or "II")	
	1X		
27		Fiscal year	
28	I2		
	"_"		
30		Semi-annual period	
31	A2	("I" or "II")	
	1X		
33			
.	.	.	.
.	.	.	.
.	.	.	.
73			
	1X		
75			
76	I2	Fiscal year	
	"_"		
78		Semi-annual period	
79	A2	("I" or "II")	

Fourth Header Record

RECORD		FIELD CONTENTS
POS.	FORMAT	
1	"0"	
	"0"	
	"0"	
4	"4"	
5	A12	Title of file
16	A12	Classification of data
17		
28	I2	First calendar year of data
29		
30		

Availability Records (one record for each six-month period of each availability)

RECORD		FIELD CONTENTS
POS.	FORMAT	
1	I2	Shipyard number (corresponds to list of yards on first header record)
2		
3	I2	Period number (corresponds to list of FY/periods on second & third header records)
4		
5	A3	Dock
7		
8	A3	Continuation indicator (contains "(C)" if record is not the first for this avail.)
10		
11	A4	Ship type
14		
16	I1X	
19	I4	Hull number
20		
24	A5	Homeport
25		
27	I3	Dock days (this period)
28		
34	I7	PSP mandays (this period)
35		
38	I4	Relative start date*
39		
42	I4	Relative end date*

* Relative dates are the number of days since 1 October of the year indicated on the fourth header record.

Availability Records (continued)

RECORD		FIELD CONTENTS
POS.	FORMAT	
43	I2	Dock class
44		
45	I2	Dock period
46		
47	I2	Undock period
48		
49	A4	Specialization category
52		
53	I2	Labor distribution histogram
54		
55	I4	Dock days (total for the availability)
58		
59	I7	PSP mandays (total for the availability)
65		
66		
	A3	Type of work
68	I2	Type select code
69		
70	I3	Docking start restraint (days)
71		
73	I3	Docking end restraint (days)
74		
76	I4	Sequence number
77		
80	I5	Overlap (days) with forecasting period
81		start or end date
85		

Availability Records (continued)

RECORD		FIELD CONTENTS
POS.	FORMAT	
86	1X	
87		
	13	Percent alterations
89		

Trailer Record (last record)

RECORD		FIELD CONTENTS
POS.	FORMAT	
1	"9"	
	"9"	
	"9"	
4	"9"	

COMMON OVERHAUL FILE

(Unit 7 - "LRPSCF" Output)

Header Record (one record)

RECORD		FIELD CONTENTS	
POS	FORMAT		
1			
:	16X	:	:
:		:	:
16			
17	"C"		
	"O"		
	"M"		
	"M"		
	"O"		
	"N"		
	"O"		
	"V"		
	"E"		
	"R"		
	"H"		
	"A"		
	"U"		
	"L"		
	"F"		
	"I"		
	"L"		
36	"E"		
	4X		
41	I2	Month	File preparation date
43	"/"		
	I2	Day	
46	"/"		
48	I2	Year	

Availability Records (one for each availability)

RECORD		FIELD CONTENTS	
POS.	FORMAT		
1	A4	Ship type	
4			
5			
8	I4	Hull number	
10			
11	I2	Fiscal year of start of availability	
12	I2	Type of work (numeric)	
13			
14	A3	Type of work (alpha)	
16			
18	I2	Month	Availability start date
20	"/"		
	I2	Day	
23	"/"		
25	I2	Year	
26	"_"		
27	I2	Month	Availability end date
29	"/"		
	I2	Day	
32	"/"		
34	I2	Year	
	1X		
36	"Y"		
37	A5	Overhaul yard	
41			
42			
	1X		

Availability Records (continued)

RECORD		FIELD CONTENTS
POS.	FORMAT	
43	"H"	
44		
	A5	Homeport
48		
	1X	
50		
	I7	Mandays (PSP)
56		
	1X	
58	"C"	
59	I2	Labor distribution histogram
60		
	1X	
62	A1	Fleet ("A" or "P")
63	A1	Inact. marker
	1X	
65	A1	Source of data
66	I1	Type commander indicator
67		
	I4	Sequence number
70		
71		
	I6	Mandays (PSP) for repair work
76		
77		
	I4	Record number
80		

LRPS RUN FILES

(One file for each sector: Units 11-14 - "LRPSCF" Output)

Header Record (First record on the file)

RECORD		FIELD CONTENTS	
POS.	FORMAT		
1			
.			
.	A18	File name	
.			
18			
19			
	I4	File number	
22			
23			
	A3	File version	
25			
26	I2	Month	File creation date
	I2	Day	
	I2	Year	
31			
32			
.			
.	41X		
.			
72			
73	"A"	[Sector]	
74	"A"		
	5X		
80	"0"	[Type Select]	
81	"0"	Record number	
	"0"		
	"0"		
	"0"		
84	"0"		

Availability Records (One per availability)

RECORD		FIELD CONTENTS	
POS.	FORMAT		
1		Ship type	
	A4		
4			
	1X		
6		Hull number	
	I4		
9			
	2X		
12		Homeport	
	A5		
16			
17	I2	Month	Availability start date
19	"/"		
	I2	Day	
22	"/"		
24	I2	Year	Availability end date
25	I2	Month	
27	"/"		
	I2	Day	
30	"/"		
32	I2	Year	
33		Sequence number	
	I4		
36			
37	I2	Priority	
38			
39	I2	Dock class	
40			
41	A1	Inact. marker	

Availability Records (continued)

RECORD		FIELD CONTENTS		
POS.	FORMAT			
42	I2	Labor distribution histogram		
43				
44				
	A5	Overhaul yard		
48	I3	Start restraint		
49				
51	I3	End restraint		
52				
54	I4	Dock time (days)		
55				
58	IX			
60	I7	Mandays (production shop productive)		
66	A3	Type of work		
67				
69	A3	Specialization category		
70				
72	A1	Yard ownership ("N" or "P")	Sector	
73		Coast ("E" or "W")		
74	I3	Percent alterations		
75				
77	2X			
80	I1	Type select		
81				
	I4	Record number		
84				

Trailer Records (Two records which follow all the availability records)

RECORD		FIELD CONTENTS
POS.	FORMAT	
1	"E"	
	"N"	
3	"D"	
4	I1	Contains "1" (first trailer record) or "2"
5		
.		.
.	68X	.
.		.
72		
73	"Z"	[Yard ownership indicator]
74	A1	Contains "X" (first trailer record) or "Y"
	5X	
80	"9"	[Type select]
81		
	I4	Record number
84		

Final Record

RECORD		FIELD CONTENTS
POS.	FORMAT	
1	"L"	
	"A"	
	"S"	
4	"T"	
5		
.	32X	.
.		.
.		.
36		[Priority]
37		
38	"9"	
39		
.	34X	.
.		.
.		.
72		[Sector]
73	"Z"	
74	"Z"	
	5X	
80	"9"	[Type select]
	"9"	[Record number]
	"9"	
	"9"	
84	"9"	

LISTING OF PROGRAM

```

C*****PROGRAM LRPSCF(INPUT,OUTPUT,TAPES=INPUT,TAPEG=OUTPUT,TAPE1,TAPE2, **** 10
C****.    TAPE3,TAPE4,TAPE7,TAPE11,TAPE12,TAPE13,TAPE14)          **** 20
C                                                              LRPS 30
C                                                              LRPS 40
C LRPSCF EXTRACTS RECORDS FROM THE LRPS ASSIGNMENT FILES. DISCARDS FROM LRPS 50
C CONSIDERATION ALL BUT THE FIRST RECORD FOR EACH AVAILABILITY. CONVERTS LRPS 60
C CERTAIN LRPS PARAMETERS INTO THE FORMAT REQUIRED BY THE COMMON FILE LRPS 70
C (CF) AND WRITES THE NEW RECORD IN THE CF FORMAT ON UNIT 7. LRPS 80
C                                                              LRPS 90
C LRPSCF ALSO PREPARES LRPS RUN FILES FROM THE EXTRACTED INFORMATION. LRPS 100
C ALTHOUGH ALL UDOK AND NEW CONSTRUCTION WORK ARE OMITTED FROM THE LRPS 110
C COMMON FILE, THEY ARE INCLUDED IN THE RUN FILES. LRPS 120
C REQUIRED FOR GROTON, NEWPORT NEWS, AND PASCAGOULA WHICH ARE NE YARDS LRPS 130
C ON THE ASSIGNMENT FILES AND THE RUN FILES, BUT ARE PE FOR THE COMMON LRPS 140
C FILE. LRPS 150
C                                                              LRPS 160
C THE FOLLOWING PARAMETERS ARE MODIFIED: LRPS 170
C   - AVAILABILITY DATES - CONVERTED FROM RELATIVE TO GREGORIAN DATES LRPS 180
C   - SHIPYARD - CONVERTED FROM NUMERIC CODE TO ALPHA DESIGNATION LRPS 190
C   - REPAIR MANDAYS - COMPUTED USING THE PERCENT ALT FIGURE OF LRPS LRPS 200
C                                                              LRPS 210
C THE COASTAL DESIGNATION WILL BE "E" OR "W" AS IT EXISTS ON LRPS, LRPS 220
C RATHER THAN "A" OR "P". THE FIELD FOR THE NUMERIC CODE FOR TYPE OF LRPS 230
C WORK WILL BE LEFT BLANK. LRPS 240
C                                                              LRPS 250
C THE EXTRACTION PERIOD DATES ARE READ FROM AN INPUT CARD. RECORDS LRPS 260
C DESCRIBING AVAILABILITIES WHICH DO NOT START OR END WITHIN THIS TIME LRPS 270
C PERIOD ARE DISCARDED. LRPS 280
C                                                              LRPS 290
C BOTH TYPE SELECT AND PRIORITY ARE SET EQUAL TO 1 FOR ALL RECORDS ON LRPS 300
C THE RUN FILES. LRPS 310
C                                                              LRPS 320
C THE FOLLOWING UNITS ARE USED BY THE PROGRAM: LRPS 330
C                                                              LRPS 340
C   UNIT 1 - INPUT - LRPS ASSIGNMENT FILE, NE LRPS 350
C   UNIT 2 - INPUT - LRPS ASSIGNMENT FILE, NW LRPS 360
C   UNIT 3 - INPUT - LRPS ASSIGNMENT FILE, PE LRPS 370
C   UNIT 4 - INPUT - LRPS ASSIGNMENT FILE, PW LRPS 380
C   UNIT 5 - INPUT - CARD INPUT LRPS 390
C   UNIT 6 - OUTPUT - LIST OF LRPS FILES PROCESSED LRPS 400
C   UNIT 7 - OUTPUT - LRPS/COMMON FILE LRPS 410
C   UNIT 11- OUTPUT - LRPS RUN FILE, NE LRPS 420
C   UNIT 12- OUTPUT - LRPS RUN FILE, NW LRPS 430
C   UNIT 13- OUTPUT - LRPS RUN FILE, PE LRPS 440
C   UNIT 14- OUTPUT - LRPS RUN FILE, PW LRPS 450
C                                                              LRPS 460
C PROGRAMMED BY LINDA L. LAMATRICE, DTNSROC, CODE 187 (APR 1977). LRPS 470
C                                                              LRPS 480
C ----- LRPS 490
C   INTEGER AVSTG, AVENDG,AVSTR,AVENDR,STPER,ENDPER LRPS 510
C                                                              LRPS 520
C   REAL*8 YARD,YARDS,HOMEP,DATE,SGROT,SNEWS,SPASC ,RFID,RFNAME **** 530
C                                                              LRPS 540
C   DIMENSION YARDS(10),AVSTG(3),AVENDG(3),STPER(3),ENDPER(3), LRPS 550
C   . LRPSID(6),COAST(4),OWN(4),TRAIL(2),DATE(3),RFID(4),RFNAME(3) LRPS 560
C                                                              LRPS 570
C   DATA BLANKS/1H /, COAST/1HE,1HW,1HE,1HW/, XN,P/1HN,1HP/, LRPS 580
C   . UDOK/4HDOK/, XNC/2HNC/, SGROT,SNEWS,SPASC/5HSGROT,5HSNEWS, LRPS 590
C   . 5HSPASC/, E,W/1HE,1HW/, OWN/2*1HN,2*1HP/, TRAIL/1HX,1HY/ LRPS 600
C                                                              LRPS 610

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C	-----	LRPS 620
C		LRPS 630
C		LRPS 640
C	READ RUN CARD. -----	LRPS 650
	READ (5,80) DATE, CODE, CODEC, RFNAME, RFID	LRPS 660
	80 FORMAT (3A3, 2A1, 2X, 3A6, 4A7)	LRPS 670
	WRITE (6,85) DATE	LRPS 680
	85 FORMAT (1H1//10X, 37HRUN FILES/COMMON FILE CREATION DATE: ,3A3)	LRPS 690
	WRITE (7,90) DATE	LRPS 700
	90 FORMAT (16X, 20HCOMMON OVERHAUL FILE, 4X, 3A3, T80, 1H0)	LRPS 710
	READ (5,100) STPER, ENDPER	LRPS 720
	100 FORMAT (19X, 3(I2, 1X), 2X, 3(I2, 1X))	LRPS 730
	ISTPER=STPER(3)*10000 + STPER(1)*100 + STPER(2)	LRPS 740
	IENDPR=ENDPER(3)*10000 + ENDPER(1)*100 + ENDPER(2)	LRPS 750
	WRITE (6,110) STPER, ENDPER	LRPS 760
	110 FORMAT (/10X, 19HEXTRACTION PERIOD: , 2(I2, 1H/), I2, 3H - ,	LRPS 770
	2(I2, 1H/), I2//10X, 31HLRPS ASSIGNMENT FILES PROCESSED,	LRPS 780
	9X, 22HLRPS RUN FILES CREATED/10X, 31(1H-), 9X, 22(1H-)/)	LRPS 790
	NVAR=1	LRPS 800
	NVARRF=11	LRPS 810
	IF (CODE.NE.P) GO TO 115	LRPS 820
	NVAR=3	LRPS 830
	NVARRF=13	LRPS 840
	115 IF (CODEC.EQ.W) GO TO 300	LRPS 850
	NREC=0	LRPS 860
C		LRPS 870
C	READ LRPS LIST OF YARDS. -----	LRPS 880
	120 READ (NVAR, 130, END=400) YARDS	**** 890
C	120 READ (NVAR, 130) YARDS	**** 900
	130 FORMAT (20X, 10(A5, 1X)/)	LRPS 910
C	*****IF (EOF(NVAR).NE.0.0) GO TO 400	**** 920
C		LRPS 930
C	READ FIRST CALENDAR YEAR OF LRPS DATA. -----	LRPS 940
	READ (NVAR, 140) LRPSID, IFSTCY	LRPS 950
	140 FORMAT (4X, 6A4, I2)	LRPS 960
	WRITE (NVARRF, 145) RFNAME, RFID(NVAR), DATE	LRPS 970
	145 FORMAT (3A6, A7, 3A2, 41X, 2HAA, 5X, 5H000000)	LRPS 980
	WRITE (6, 150) LRPSID, IFSTCY, RFNAME, RFID(NVAR), DATE	LRPS 990
	150 FORMAT (13X, 6A4, I2, 7X, 3A6, A7, 3A2)	LRPS1000
C		LRPS1010
C	READ NEXT LRPS RECORD. -----	LRPS1020
	200 READ (NVAR, 210) NUMYD, NUMBER, CONT, SHIP, IHULL, HOMEPT, AVSTR,	LRPS1030
	AVENDR, ICLASS, SPEC, LDH, IDTIME, MDTOT, TW, ISRES, IERES, ISEQ, ILAP,	LRPS1040
	IPCTA	LRPS1050
	210 FORMAT (2I2, 3X, A3, A4, 1X, I4, A5, 10X, 2I4, I2, 4X, A4, I2, I4, I7, A3, 2X,	LRPS1060
	2I3, A4, I5, 1X, I3)	LRPS1070
	IF (NUMYD.EQ.99 .AND. NUMBER.EQ.99) GO TO 285	LRPS1080
C		LRPS1090
C	DISCARD RECORD IF CONTINUATION RECORD. -----	LRPS1100
	IF (CONT.NE.BLANKS) GO TO 200	LRPS1110
	YARD=YARDS(NUMYD)	LRPS1120
C		LRPS1130
C	DISCARD RECORD IF NOT WITHIN EXTRACTION PERIOD. -----	LRPS1140
	IF (ILAP.LT.0) GO TO 220	LRPS1150
	AVENDR=AVENDR + ILAP	LRPS1160
	GO TO 230	LRPS1170
	220 AVSTR=AVSTR + ILAP	LRPS1180
	230 CALL RTGCON(AVSTR, AVSTG, IFSTCY)	LRPS1190
	CALL RTGCON(AVENDR, AVENDG, IFSTCY)	LRPS1200
	AVSTR= 10000*AVSTG(3) + 100*AVSTG(1) + AVSTG(2)	LRPS1210
	AVENDR=10000*AVENDG(3) + 100*AVENDG(1) + AVENDG(2)	LRPS1220
	IF (AVENDR.LT.ISTPER .OR. AVSTR.GT.IENDPR) GO TO 200	LRPS1230
C		LRPS1240

C CALCULATE FISCAL YEAR OF START OF AVAILABILITY. -----	LRPS1250
ISTFY=AVSTG(3)	LRPS1260
IF (AVSTG(1).GE.10) ISTFY=ISTFY + 1	LRPS1270
C	LRPS1280
C WRITE LRPS/COMMON FILE RECORD. -----	LRPS1290
IF (SHIP.EQ.UDOK .OR. TW.EQ.XNC) GO TO 270	LRPS1300
MDREP=(1.0 - FLOAT(IPCTA)/100.0)*MDTOT	LRPS1310
NREC=NREC + 1	LRPS1320
WRITE (7,250) SHIP, IHULL, ISTFY, TW, AVSTG, AVENDG, YARD, HOMEPT,	LRPS1330
MDTOT, LDH, COAST(NVAR), ISEQ, MDREP, NREC	LRPS1340
250 FORMAT (A4, I4, 1X, I2, 2X, A3, 1X, 2(I2, 1H/), I2, 1H-, 2(I2, 1H/), I2, 2H Y,	LRPS1350
A5, 2H H, A5, 1X, I7, 2H C, I2, 1X, A1, 4X, A4, I6, I4)	LRPS1360
C	LRPS1370
C WRITE RUN FILE RECORD. -----	LRPS1380
270 NRECRF=NRECRF + 1	LRPS1390
IPRI=1	LRPS1400
ITSEL=1	LRPS1410
WRITE (NVARRF, 280) SHIP, IHULL, HOMEPT, AVSTG, AVENDG, ISEQ, IPRI,	LRPS1420
DCLASS, LDH, YARD, ISRES, IERES, IDTIME, MDTOT, TW, SPEC, OWN(NVAR),	LRPS1430
COAST(NVAR), IPCTA, ITSEL	LRPS1440
280 FORMAT (A4, 1X, I4, 2X, A5, 2(I2, 1H/), I2), A4, 2I2, 1X, I2, A5, 2I3, I4, 1X,	LRPS1450
I7, 2A3, 2A1, I3, 2X, I1, 4X)	LRPS1460
GO TO 200	LRPS1470
C	LRPS1480
C WRITE RUN FILE TRAILER RECORDS. -----	LRPS1490
285 WRITE (NVARRF, 290) (I, TRAIL(I), I=1, 2)	LRPS1500
290 FORMAT (3HEND, I1, 68X, 1HZ, A1, 5X, 1H9, 4X)	LRPS1510
WRITE (NVARRF, 295)	LRPS1520
295 FORMAT (4HLAST, 33X, 1H9, 34X, 2HZZ, 5X, 5H99999)	LRPS1530
C	LRPS1540
C SELECT NEXT ASSIGNMENT FILE TO PROCESS. -----	LRPS1550
300 NVAR=NVAR+1	LRPS1560
NVARRF=NVARRF+1	LRPS1570
GO TO (320, 320, 330, 340, 400), NVAR	LRPS1580
C	LRPS1590
320 IF (CODEC.EQ.E .OR. CODE.EQ.P) GO TO 300	LRPS1600
GO TO 120	LRPS1610
C	LRPS1620
330 IF (CODEC.EQ.W .OR. CODE.EQ.XN) GO TO 300	LRPS1630
GO TO 120	LRPS1640
C	LRPS1650
340 IF (CODEC.NE.E .AND. CODE.NE.XN) GO TO 120	LRPS1660
C	LRPS1670
400 STOP	LRPS1680
END	LRPS1690

	SUBROUTINE RTGCON(IREL,IGREG,IFSTCY)	RTGC 10
C		RTGC 20
C		RTGC 30
C	SUBROUTINE RTGCON (RELATIVE TO GREGORIAN CONVERSION) CONVERTS THE	RTGC 40
C	DATE IREL, AN LRPS RELATIVE DATE, TO ITS GREGORIAN DATE EQUIVALENT,	RTGC 50
C	IGREG.	RTGC 60
C		RTGC 70
C		RTGC 80
C	DIMENSION IREG(3)	RTGC 90
C	-----	RTGC 100
C		RTGC 110
C		RTGC 120
	M=IREL + 270	RTGC 130
	IF (M.LT.0) GO TO 150	RTGC 140
	IGREG(3)=M/360 + IFSTCY	RTGC 150
100	IGREG(1)=MOD(M,360)/30 + 1	RTGC 160
	IGREG(2)=MOD(M,30) + 1	RTGC 170
	RETURN	RTGC 180
C		RTGC 190
150	IGREG(3)=IFSTCY	RTGC 200
160	IGREG(3)=IGREG(3) - 1	RTGC 210
	M=M + 360	RTGC 220
	IF (M.LT.0) GO TO 160	RTGC 230
	GO TO 100	RTGC 240
	END	RTGC 250

SAMPLE RUN

A sample run was made using an extract of the LRPS Assignment Files (Navy yards only). The extract consisted of only CGN 9 through CV 62 ships. A listing of all input and output files, cards, and print-out is presented in this section.

Unit 5 - Card Input

07/22/78 NB LRPS RUN FILE 0101 0201 0301 0401
EXTRACTION PERIOD: 10/01/78 - 9/30/82

Unit 6 - Printed Output

RUN FILES/COMMON FILE CREATION DATE: 07/22/78

EXTRACTION PERIOD: 10/ 1/78 - 9/30/82

LRPS ASSIGNMENT FILES PROCESSED

LRPS RUN FILES CREATED

NE-D4 110476OFFICIAL USE77
NW-D8 122076OFFICIAL USE77

LRPS RUN FILE 0101 072278
LRPS RUN FILE 0201 072278

Unit 7 (output) - Common Overhaul File (unsorted)

		COMMON OVERHAUL FILE		07/22/78			0
CGN	40 79	FO	11/ 6/78-	1/ 5/79	YSNEWS HD 05	6000 C 1 E	2 6000 1
CGN	41 80	FO	3/17/80-	5/16/80	YSNEWS HD 05	5000 C 1 E	2 5000 2
CV	62 78	RO	11/21/77-	10/19/78	YNORVA HNORVA	346352 C23 E	40204347 3
CGN	39 78	PS	6/26/78-	10/25/78	YNORVA HNORVA	35000 C 1 E	3 35000 4
CV	60 79	RO	4/20/79-	12/ 1/79	YNORVA HMA YPT	240000 C23 E	60127199 5
CGN	40 79	PS	7/16/79-	11/16/79	YNORVA HNORVA	45000 C 1 E	3 45000 6
CGN	38 79	RA	8/ 3/79-	10/ 2/79	YNORVA HNORVA	12000 C 1 E	4 8160 7
CV	62 79	RA	9/ 1/79-	11/26/79	YNORVA HNORVA	69170 C17 E	41 40118 8
CV	59 80	RA	5/ 3/80-	7/29/80	YNORVA HNORVA	60000 C17 E	42 34200 9
CGN	41 81	PS	12/15/80-	3/20/81	YNORVA HNORVA	45000 C 1 E	3 45000 10
CGN	37 81	RO	1/ 2/81-	3/ 5/82	YNORVA HNORVA	278000 C13 E	10239080 11
CV	59 82	RA	10/ 1/81-	1/ 1/82	YNORVA HNORVA	60000 C17 E	43 33599 12
CGN	38 82	RO	7/ 1/82-	9/ 2/83	YNORVA HNORVA	278000 C13 E	10252979 13
CGN	40 82	RA	5/ 1/82-	7/ 1/82	YCHASN HCHASN	12000 C 1 E	4 0 14
CV	43 78	RO	11/30/77-	11/29/78	YLBECH HALAM	342067 C24 W	40283915 15
CV	41 81	RO	10/12/80-	10/12/81	YLBECH HALAM	396045 C 1 W	40312875 16
CV	41 79	RA	11/10/78-	1/11/79	YPUGET HALAM	40000 C17 W	36 20799 17
CGN	25 79	RA	1/15/79-	3/15/79	YPUGET HLBECH	30000 C 1 W	24 23999 18
CGN	36 79	RA	1/15/79-	4/16/79	YPUGET HLBECH	47204 C 1 W	4 35875 19
CGN	35 79	RA	1/15/79-	3/15/79	YPUGET HSD	12000 C 1 W	11 0 20
CGN	9 79	C	4/ 1/79-	4/ 1/82	YPUGET HLBECH	739000 C 9 W	30739000 21
CGN	39 79	RA	7/15/79-	9/15/79	YPUGET HSD	12000 C 1 W	4 0 22
CGN	36 80	RQ	4/14/80-	6/14/81	YPUGET HLBECH	278550 C 9 W	10239553 23
CGN	35 81	RO	6/ 1/81-	8/ 1/82	YPUGET HSD	298507 C19 W	20256716 24
CGN	25 82	RO	6/ 1/82-	8/ 1/83	YPUGET HLBECH	298507 C19 W	30256716 25

Unit 1 (input) - LRPS Assignment File, NE

0 1	PTSMH	SGROT	PHILA	SNEWS	NORVA	CHASN	SPASC	LOFYN	LOFYD		
0 2	78-I	78-II	79-I	79-II	80-I	80-II	81-I	81-II	82-I	82-II	
0 3	83-I	83-II	84-I	84-II	85-I	85-II	86-I	86-II	87-I	87-II	
0 4	4NE-D4	110476	OFFICIAL	USE77	NAVAL	SHIPYARDS	EAST	COAST			
4 1G01	CGN	39D	05	20	0	34	9546	1	1AAN	1	20
4 3G01	CGN	40D	05	20	6000	395	45446	3	3AAN	1	20
4 5G01	CGN	41D	05	11	618	886	94546	5	6AAN	1	20
4 6G01(C)	CGN	41D	05	9	4381	886	94546	5	6AAN	1	20
5 1G08	CV	62NORVA100			140469	50	378	5	1	1CVA	23
5 2G08(C)	CV	62NORVA	0	199596	50	378	5	1	1CVA	23	100
5 2---	CGN	37NORVA	0	20400	260	321462	121AAN	1	0	20400RA	3
5 3G03	CGN	39NORVA	15	31554	265	38446	2	2AAN	1	15	35000PS
5 3G08(C)	CV	62NORVA	0	6286	50	378	5	1	1CVA	23	100
5 3G03(C)	CGN	39NORVA	0	3445	265	38446	2	2AAN	1	15	35000PS
5 4G08	CV	60MAYPT	80	194944	559	780	5	4	4CVA	23	80
5 4G04	CGN	40NORVA	15	30588	645	76546	4	4AAN	1	15	45000PS
5 4---	CGN	38NORVA	0	11955	662	721462	121AAN	1	0	12000RA	3
5 5G08(C)	CV	62NORVA	0	29389	690	775	52121CVA	17	0	69170RA	4
5 5G04(C)	CGN	40NORVA	0	14411	645	76546	4	4AAN	1	15	45000PS
5 5---	(C)CGN	38NORVA	0	44	662	721462	121AAN	1	0	12000RA	3
5 5---	(C)CV	62NORVA	0	39780	690	775	52121CVA	17	0	69170RA	4
5 6---	CV	59NORVA	0	60000	9321018	52121CVA	17	0	60000RA	4	0
5 7G03	CGN	41NORVA	15	450001154124946	7	7AAN	1	15	45000PS	5	3
5 7G04	CGN	37NORVA	24	683691171159446	7	8AAN	13	80	2780000RA	4	3279
5 8G04(C)	CGN	37NORVA	56	161821171159446	7	8AAN	13	80	2780000RA	4	3279
5 9G04(C)	CGN	37NORVA	0	478081171159446	7	8AAN	13	80	2780000RA	4	3279
5 9---	CV	59NORVA	0	6000014401530	52121CVA	17	0	60000RA	4	0	43
5 10G03	CGN	38NORVA	80	6980817102131461010AAN	13	80	2780000RA	4	3278	10	0
5 11G03(C)	CGN	38NORVA	0	16182017102131461010AAN	13	80	2780000RA	4	3278	10	0
5 12G03(C)	CGN	38NORVA	0	4637117102131461010AAN	13	80	2780000RA	4	3278	10	0
5 12G08	CV	59NORVA100		20648019802340	51212CVA	22	100	3960000RA	4	3200	50
5 13G08(C)	CV	59NORVA	0	18898119802340	51212CVA	22	100	3960000RA	4	3200	50
5 13---	CGN	41NORVA	0	80002160220462121AAN	1	0	80000RA	3	0	4	0
5 14G08(C)	CV	59NORVA	0	53719802340	51212CVA	22	100	3960000RA	4	3200	50
5 15G04	CGN	40CHASN	80	8314526122972461515AAN	13	80	2790000RA	4	3226	10	0
5 16G04(C)	CGN	40CHASN	0	17203326122972461515AAN	13	80	2790000RA	4	3226	10	0
5 17G04(C)	CGN	40CHASN	0	2382026122972461515AAN	13	80	2790000RA	4	3226	10	0
5 17---	CV	59NORVA	0	600028802970	52121CVA	1	0	60000RA	4	0	51
610---	CGN	40CHASN	0	1200016501710462121AAN	1	0	12000RA	3	0	4	0

9999

Unit 2 (input) - LRPS Assignment File, NW

	LBECH	MARE	PUGET	PEARL	POFYN	POFYO	81-11	81-11	81-11	82-11	82-11
0 1	78-1	78-1	79-1	79-1	80-1	80-1	81-1	81-1	81-1	82-1	82-1
0 2	83-1	83-1	84-1	84-1	85-1	85-1	86-1	86-1	86-1	87-1	87-1
0 3	0 4NW-08	1220760	OFFICIAL	USE77	NAVAL	SHIPYARDS	WEST	COAST			
1 1	CV	0 124004	59	418'02121CVA	24	0	342067RD	4	0	0	17
1 2	CV	0 199985	59	418'02121CVA	24	0	342067RD	4	0	0	17
1 3	CV	0 18076	59	418'02121CVA	24	0	342067RD	4	0	0	17
1 7G01	CV	0 179097	1091145110	7 7CVA	1	90	396045RD	4	0	100	21
1 8G01	CV	0 215472	1091145110	7 7CVA	1	90	396045RD	4	0	100	21
1 9G01	CV	0 1474109	1145110	7 7CVA	1	90	396045RD	4	0	100	21
213	CGN	0 250002	264232302121AAN	1	0	25000RA	4	0	0	31	0
3 1	CGN	0 111606	0 134 52121CVA	24	0	443300RD	4	0	0	50	38
3 3	CGN	0 40000	399 460102121CVA	17	0	40000RA	4	0	0	36	48
3 3	CGN	0 30000	464 524502121AAN	1	0	30000RA	3	0	0	24	0
3 3	CGN	0 43925	464 555462121AAN	1	0	47201RA	3	0	0	4	0
3 3	CGN	0 12000	464 524452121AAN	1	0	12000RA	3	0	0	11	0
3 4	CGN	0 3278	464 555462121AAN	1	0	47201RA	3	0	0	4	0
3 4G02	CGN	782471	540162030 4 5AAN	9	200	739000C	4	3800	30	0	0
3 4	CGN	0 12000	644 704452121AAN	1	0	12000RA	3	0	0	4	0
3 5G02	CGN	23 163508	540162030 4 5AAN	9	200	739000C	4	3800	30	0	0
3 5G02	CGN	0 164152	540162030 4 5AAN	9	200	739000C	4	3800	30	0	0
3 6G04	CGN	80 116308	913133346 6 6AAN	9	80	278550RD	4	3247	10	0	14
3 7G02	CGN	0 163582	540162030 4 5AAN	9	200	739000C	4	3800	30	0	0
3 7G04	CGN	0 144621	913133346 6 6AAN	9	80	278550RD	4	3247	10	0	14
3 8G02	CGN	0 123009	540162030 4 5AAN	9	200	739000C	4	3800	30	0	0
3 8G04	CGN	0 17560	913133346 6 6AAN	9	80	278550RD	4	3247	10	0	14
3 8G01	CGN	80 757601	320174045 8 8AAN	19	80	298507RD	4	3246	20	0	14
3 9G02	CGN	0 42207	540162030 4 5AAN	9	200	739000C	4	3800	30	0	0
3 9G01	CGN	0 165233	1320174045 8 8AAN	19	80	298507RD	4	3246	20	0	14
3 10G02	CGN	0 68	540162030 4 5AAN	9	200	739000C	4	3800	30	0	0
3 10G01	CGN	0 575131	320174045 8 8AAN	19	80	298507RD	4	3246	20	0	14
3 11G05	CV	0 145076	18442174 51111CVA	1	100	396045RD	4	3100	60	0	40
3 12G02	CGN	0 757601	6802100501010AAN	19	80	298507RD	4	3246	20	0	14
3 12G05	CV	0 165233	16802100501010AAN	19	80	298507RD	4	3246	20	0	14
3 13G05	CV	100 145076	18442174 51111CVA	1	100	396045RD	4	3100	60	0	40
3 14G05	CGN	0 575131	6802100501010AAN	19	80	298507RD	4	3246	20	0	14
3 15G05	CGN	0 248957	18442174 51111CVA	1	100	396045RD	4	3100	60	0	40
3 16G05	CGN	0 201018	442174 51111CVA	1	100	396045RD	4	3100	60	0	40
3 17G02	CGN	0 250002	222280462121AAN	1	0	25000RA	4	0	0	11	0
3 18G02	CGN	48 627722	4022822461415AAN	10	80	278550RD	4	3200	10	0	30
3 19G02	CGN	32 148668	24022822461415AAN	10	80	278550RD	4	3200	10	0	30
3 20G02	CGN	0 249542	6402700452121AAN	1	0	25000RA	4	0	0	21	0
3 21G02	CGN	0 669082	4022822461415AAN	10	80	278550RD	4	3200	10	0	30
3 22G02	CGN	0 452640	2700452121AAN	1	0	25000RA	4	0	0	21	0
3 23G02	CGN	73 412312	9843239301718AAN	4	80	200000RF	4	3135	40	165	30
3 24G02	CGN	0 246793	003060462121AAN	17	0	25000RA	4	0	0	31	0
3 25G02	CGN	7 976532	9843239301718AAN	4	80	200000RF	4	3135	40	165	30
3 26G02	CGN	0 320300	003060462121AAN	17	0	25000RA	4	0	0	31	0
9999											

Unit 11 (output) - LRPS Run File, NE (unsorted)

LRPS RUN FILE	0101 072278								AA	00000
CGN	40	D 05 11/ 6/78 1/ 5/79	2 1 0	1SNEWS	3 33 20	6000FO	AANNE	0	1	
CGN	41	D 05 3/17/80 5/16/80	2 1 0	1SNEWS	3 29 20	5000FO	AANNE	0	1	
CV	62	NORVA11/21/7710/19/78	40 1 0	23NORVA	3178 100	346352RO	CVANE	41	1	
CGN	39	NORVA 6/26/7810/25/78	3 1 0	1NORVA	3 85 15	35000PS	AANNE	0	1	
CV	60	MAYPT 4/20/7912/ 1/79	60 1 0	23NORVA	3100 80	240000RO	CVANE	47	1	
CGN	40	NORVA 7/16/7911/16/79	3 1 0	1NORVA	3 86 15	45000PS	AANNE	0	1	
CGN	38	NORVA 8/ 3/7910/ 2/79	4 1 0	1NORVA	0 0 0	12000RA	AANNE	32	1	
CV	62	NORVA 9/ 1/7911/26/79	41 1 0	17NORVA	0 0 0	69170RA	CVANE	42	1	
CV	59	NORVA 5/ 3/80 7/29/80	42 1 0	17NORVA	0 0 0	60000RA	CVANE	43	1	
CGN	41	NORVA12/15/80 3/20/81	3 1 0	1NORVA	3 69 15	45000PS	AANNE	0	1	
CGN	37	NORVA 1/ 2/81 3/ 5/82	10 1 0	13NORVA	3279 80	278000RO	AANNE	14	1	
CV	59	NORVA10/ 1/81 1/ 1/82	43 1 0	17NORVA	0 0 0	60000RA	CVANE	44	1	
CGN	38	NORVA 7/ 1/82 9/ 2/83	10 1 0	13NORVA	3278 80	278000RO	AANNE	9	1	
CGN	40	CHASN 5/ 1/82 7/ 1/82	4 1 0	1CHASN	0 0 0	12000RA	AANNE	100	1	
END1							ZX		9	
END2							ZY		9	
LAST			9				ZZ		99999	

Unit 12 (output) - LRPS Run File, NW (unsorted)

LRPS RUN FILE	0201 072278								AA	00000
CV	43	ALAM 11/30/7711/29/78	40 1 0	24LBECH	0 0 0	342067RO	CVANW	17	1	
CV	41	ALAM 10/12/8010/12/81	40 1 0	1LBECH	0100 90	396045RO	CVANW	21	1	
CV	41	ALAM 11/10/78 1/11/79	36 1 0	17PUGET	0 0 0	40000RA	CVANW	48	1	
CGN	25	LBECH 1/15/79 3/15/79	24 1 0	1PUGET	0 0 0	30000RA	AANNW	20	1	
CGN	36	LBECH 1/15/79 4/16/79	4 1 0	1PUGET	0 0 0	47204RA	AANNW	24	1	
CGN	35	SD 1/15/79 3/15/79	11 1 0	1PUGET	0 0 0	12000RA	AANNW	100	1	
CGN	9	LBECH 4/ 1/79 4/ 1/82	30 1 0	9PUGET	3800 200	739000C	AANNW	0	1	
CGN	39	SD 7/15/79 9/15/79	4 1 0	1PUGET	0 0 0	12000RA	AANNW	100	1	
CGN	36	LBECH 4/14/80 6/14/81	10 1 0	9PUGET	3247 80	278550RO	AANNW	14	1	
CGN	35	SD 6/ 1/81 8/ 1/82	20 1 0	19PUGET	3246 80	298507RO	AANNW	14	1	
CGN	25	LBECH 6/ 1/82 8/ 1/83	30 1 0	19PUGET	3323 80	298507RO	AANNW	14	1	
END1							ZX		9	
END2							ZY		9	
LAST			9				ZZ		99999	

LRPS Run File, NE (sorted)

LRPS RUN FILE	0101 072278							AA	00010
CGN	37	NORVA 1/ 2/81 3/ 5/82	10 1 0	13NORVA	3279	80	278000RD	AANNE 14	1
CGN	38	NORVA 8/ 3/7910/ 2/79	4 1 0	1NORVA	0 0	0	12000RA	AANNE 32	1
CGN	38	NORVA 7/ 1/82 9/ 2/83	10 1 0	13NORVA	3278	80	278000RD	AANNE 9	1
CGN	39	NORVA 6/26/7810/25/78	3 1 0	1NORVA	3 85	15	35000PS	AANNE 0	1
CGN	40	D 05 11/ 6/78 1/ 5/79	2 1 0	1SNEWS	3 33	20	6000FD	AANNE 0	1
CGN	40	NORVA 7/16/7911/16/79	3 1 0	1NORVA	3 86	15	45000PS	AANNE 0	1
CGN	40	CHASN 5/ 1/82 7/ 1/82	4 1 0	1CHASN	0 0	0	12000RA	AANNE100	1
CGN	41	D 05 3/17/80 5/16/80	2 1 0	1SNEWS	3 29	20	5000FD	AANNE 0	1
CGN	41	NORVA12/15/80 3/20/81	3 1 0	1NORVA	3 69	15	45000PS	AANNE 0	1
CV	59	NORVA 5/ 3/80 7/29/80	42 1 0	17NORVA	0 0	0	60000RA	CVANE 43	1
CV	59	NORVA10/ 1/81 1/ 1/82	43 1 0	17NORVA	0 0	0	60000RA	CVANE 44	1
CV	60	MAYPT 4/20/7912/ 1/79	60 1 0	23NORVA	3100	80	240000RD	CVANE 47	1
CV	62	NORVA11/21/7710/19/78	40 1 0	23NORVA	3178	100	346352RD	CVANE 41	1
CV	62	NORVA 9/ 1/7911/26/79	41 1 0	17NORVA	0 0	0	69170RA	CVANE 42	1
END1							ZX		9
END2							ZY		9
LAST			9				ZZ		99999

LRPS Run File, NW (sorted)

LRPS RUN FILE	0201 072278							AA	00010
CGN	9	LBECH 4/ 1/79 4/ 1/82	30 1 0	9PUGET	3800	200	739000C	AANNW 0	1
CGN	25	LBECH 1/15/79 3/15/79	24 1 0	1PUGET	0 0	0	30000RA	AANNW 20	1
CGN	25	LBECH 6/ 1/82 8/ 1/83	30 1 0	19PUGET	3323	80	298507RD	AANNW 14	1
CGN	35	SD 1/15/79 3/15/79	11 1 0	1PUGET	0 0	0	12000RA	AANNW100	1
CGN	35	SD 6/ 1/81 8/ 1/82	20 1 0	19PUGET	3246	80	298507RD	AANNW 14	1
CGN	36	LBECH 1/15/79 4/16/79	4 1 0	1PUGET	0 0	0	47204RA	AANNW 24	1
CGN	36	LBECH 4/14/80 6/14/81	10 1 0	9PUGET	3247	80	278550RD	AANNW 14	1
CGN	39	SD 7/15/79 9/15/79	4 1 0	1PUGET	0 0	0	12000RA	AANNW100	1
CV	41	ALAM 11/10/78 1/11/79	36 1 0	17PUGET	0 0	0	40000RA	CVANW 48	1
CV	41	ALAM 10/12/8010/12/81	40 1 0	1LBECH	0100	90	396045RD	CVANW 21	1
CV	43	ALAM 11/30/7711/29/78	40 1 0	24LBECH	0 0	0	342067RD	CVANW 17	1
END1							ZX		9
END2							ZY		9
LAST			9				ZZ		99999

PROGRAM PRCOF

DESCRIPTION

The program PRCOF prints out the Common Overhaul File (COF) in readable format with column headings. It also redetermines the start fiscal year of each availability, numbers the records, and creates a new COF.

The deck set-up for the PRCOF program includes a sort of the COF on the following parameters (in the order listed):

- Shipyard
- Ship type
- Hull number
- Sequence number

RUN SET-UP

The following set-up is used to run the PRCOF program on the IBM 360/370 computer:

```
//NVSPRCOF JOB (XXXXXXXXXX,XXXXX),USER,CLASS=C,TIME=(,10),MSGLEVEL=1
//JOB LIB DD DSN=NVS01.MISC.LIB,DISP=SHR

// EXEC SDA                                     (SORT COMMON OVERHAUL FILE)
//SORTIN DD DSN={COMMON OVERHAUL FILE},DISP=SHR
//SORTOUT DD DSN=&&TEMP,DISP=(,PASS),UNIT=SYSDA,
// SPACE=(800,500),DCB=(LRECL=80,RECFM=FB,BLKSIZE=800)
//SYSIN DD * (SORT BY YARD, SHIP, AND SEQUENCE NUMBER)
SORT FIELDS=(37,5,A,1,8,A,67,4,A),FORMAT=CH

// EXEC PGM=PRCOF                                (EXECUTE PROGRAM PRCOF)
//GO.FT05F001 DD *                                (CARD INPUTS - NONE)
//GO.FT06F001 DD SYSOUT=A                        (FORMATTED PRINTOUT OF COMMON FILE)
//GO.FT08F001 DD DSN=&&TEMP,DISP=(OLD,DELETE)      (INPUT FILE)
//GO.FT09F001 DD DSN={COMMON OVERHAUL FILE},DISP=SHR (OUTPUT FILE)
```

INPUT/OUTPUT

The following units are used by the PRCOF program:

Unit 6 - Output - Printout of the COF

Unit 8 - Input - Sorted Common Overhaul File

Unit 9 - Output - Renumbered Common Overhaul File

An example of the hardcopy output generated by unit 6 is presented on pages 45-47.

COMMON OVERHAUL FILE

(Unit 7 - "PRCOF" Input and Unit 9 - "PRCOF" Output)

Header Record (one record)

RECORD		FIELD CONTENTS	
POS	FORMAT		
1			
.	.		
:	16X		
.	.		
16			
17	"C"		
	"O"		
	"M"		
	"M"		
	"O"		
	"N"		
	"O"		
	"V"		
	"E"		
	"R"		
	"H"		
	"A"		
	"U"		
	"L"		
	"F"		
	"I"		
	"L"		
36	"E"		
	4X		
41	I2	Month	File preparation date
43	"/"		
	I2	Day	
46	"/"		
	I2	Year	
48			

Availability Records (one for each availability)

RECORD		FIELD CONTENTS	
POS.	FORMAT		
1	A4	Ship type	
4			
5			
8	I4	Hull number	
10			
11	1X		
12	I2	Fiscal year of start of availability	
13	I2	Type of work (numeric)	
14			
16	A3	Type of work (alpha)	
18			
20	I2	Month	Availability start date
	"/"		
	I2	Day	
23	"/"		
25	I2	Year	
26	"_"		
27	I2	Month	Availability end date
29			
	I2	Day	
32	"/"		
34	I2	Year	
	1X		
36	"Y"		
37	A5	Overhaul yard	
41			
42			
	1X		

Availability Records (continued)

RECORD POS.	FORMAT	FIELD CONTENTS
43	"H"	
44		
	A5	Homeport
48		
	1X	
50		
	I7	Mandays (PSP)
56		
	1X	
58	"C"	
59		
60	I2	Labor distribution histogram
	1X	
62	A1	Fleet ("A" or "P")
63	A1	Inact. marker
	1X	
65	A1	Source of data
66	I1	Type commander indicator
67		
	I4	Sequence number
70		
71		
	I6	Mandays (PSP) for repair work
76		
77		
	I4	Record number
80		

LISTING OF PROGRAM

```

C*****PROGRAM PRCOF(INPUT,OUTPUT,TAPE5=INPUT,TAPE6=OUTPUT,TAPE8,TAPE9) ***** 10
C                                                                                   PRCO 20
C                                                                                   PRCO 30
C PRCOF (PRINT COMMON OVERHAUL FILE) RE-DETERMINES THE START FISCAL PRCO 40
C YEAR, RENUMBERS THE RECORDS OF THE COMMON OVERHAUL FILE (COF). COPIES PRCO 50
C THEM ONTO UNIT 9, AND PRINTS THEM OUT WITH COLUMN HEADINGS. OUTPUT PRCO 60
C IS SINGLE SPACED WITH DOUBLE SPACE BETWEEN SHIPS. PRCO 70
C                                                                                   PRCO 80
C THE FOLLOWING UNITS ARE USED BY THE PROGRAM: PRCO 90
C                                                                                   PRCO 100
C     UNIT 6 - OUTPUT - PRINTOUT (WITH COLUMN HEADINGS) OF THE COMMON PRCO 110
C     OVERHAUL FILE PRCO 120
C     UNIT 8 - INPUT - COMMON OVERHAUL FILE PRCO 130
C     UNIT 9 - OUTPUT - RE-NUMBERED COF. PRCO 140
C                                                                                   PRCO 150
C PROGRAMMED BY LINDA L. LAMATRICE, DTNSRDC, CODE 187 (APRIL, 1978). PRCO 160
C                                                                                   PRCO 170
C                                                                                   PRCO 180
C     REAL*8 RDATE,YARD,HOMPT,SHIPUL,MOTOT,MOREP,SHIPP,SDATE,EDATE, PRCO 190
C     YARDP ***** 195
C                                                                                   PRCO 200
C     DATA YARDP/1H /. BLANK/1H / PRCO 210
C                                                                                   PRCO 220
C ----- PRCO 230
C NREC=0 PRCO 240
C READ (8,100) RDATE PRCO 250
C 100 FORMAT (16X,21HCOMMON OVERHAUL FILE ,3X,A8,T80,1H0) PRCO 260
C WRITE (9,100) RDATE PRCO 270
C                                                                                   PRCO 280
C READ NEXT RECORD FROM COMMON FILE. ----- PRCO 290
C 120 READ (8,130,END=400) SHIPUL,FY,NTW,TW,SDATE,EDATE,YARD,HOMPT, PRCO 300
C *120 READ (8,130) SHIPUL,FY,NTW,TW,SDATE,EDATE,YARD,HOMPT, ***** 310
C     MOTOT,LDH,FLEET,QUIT,SOURCE,TYCOM,ISEQ,MOREP,IDUM,ISM,ISY PRCO 320
C 130 FORMAT (A8,1X,2A2,A3,1X,A8,1H-,A8,2H Y,A5,2H H,A5,1X,A7,2H C, PRCO 330
C     A2,2(1X,2A1),A4,A6,1A,T10,12,T18,12,T24,12) PRCO 340
C *****IF (EOF(8).NE.0.0) GO TO 400 ***** 350
C                                                                                   PRCO 360
C RE-CALCULATE FISCAL YEAR AND WRITE REVISED RECORD. ----- PRCO 370
C IFY=ISY PRCO 380
C IF (ISM.GE.10) IFY=IFY+1 PRCO 390
C NREC=NREC+1 PRCO 400
C WRITE (9,130) SHIPUL,BLANK,NTW,TW,SDATE,EDATE,YARD,HOMPT, PRCO 410
C     MOTOT,LDH,FLEET,QUIT,SOURCE,TYCOM,ISEQ,MOREP,NREC,IFY PRCO 420
C                                                                                   PRCO 430
C NEW PAGE. ----- PRCO 440
C IF (NREC.GT.1) GO TO 200 PRCO 450
C 135 LINE=6 PRCO 460
C YARDP=YARD PRCO 470
C WRITE (6,140) RDATE,YARD PRCO 480
C 140 FORMAT (1H1/12X,22HCOMMON OVERHAUL FILE: ,A8//55X,6HYARD: ,A5/ PRCO 490
C     55X,11(1H-)/) PRCO 495
C 150 WRITE (6,160) PRCO 500
C 160 FORMAT ( //14X,46HSHIP FY TW= TW AVAILABILITY DATES YARD, ***** 510
C *160 FORMAT ( //14X,46HSHIP FY TW# TW AVAILABILITY DATES YARD, ***** 520
C     55H HOMEPORT MANDAYS LDH FLEET QUIT SOURCE TYCOM SEQ, PRCO 530
C     10H REP. MD./ PRCO 540
C     14X,46H----- PRCO 550
C     55H ----- PRCO 560
C     10H -----/) PRCO 570
C LINE=LINE+4 PRCO 580

```


C		PRCO 590
C	WRITE SHIP RECORD. -----	PRCO 600
	200 IF (YARD.NE.YARDP) GO TO 135	PRCO 605
	IF (LINE.LT.57) GO TO 220	PRCO 610
	WRITE (6,210)	PRCO 620
	210 FORMAT (1H1)	PRCO 630
	LINE=0	PRCO 640
	GO TO 150	PRCO 650
	220 WRITE (6,230) NREC,SHIPUL,IFY,NTW,TW,SDATE,EDATE,YARD,HOMEP,	PRCO 700
	MDTOT,LDH,FLEET,QUIT,SOURCE,TYCOM,ISEQ,MDREP	PRCO 710
	230 FORMAT (1H , 4X,14,3H. ,A8,2X,12,3X,A2,2X,A3,2X,A8,1H-,A8,	PRCO 720
	3X,A5,4X,A5,2X,A7,3X,A2,4(5X,A1),3X,A4,3X,A6)	PRCO 730
	LINE=LINE+1	PRCO 740
	GO TO 120	PRCO 750
C		PRCO 760
C	END-OF-FILE ENCOUNTERED ON COMMON FILE. -----	PRCO 770
	400 STOP	PRCO 780
	END	PRCO 790

SAMPLE RUN

The COF created by the sample run of the LRPSCF program (see page 32) was used as input to the sort which precedes PRCOF. This section presents a listing of the PRCOF sample run.

Unit 8 (input) - Common Overhaul File (sorted)

COMMON OVERHAUL FILE 07/22/78										
CGN	40	82	RA	5/ 1/82- 7/ 1/82	YCHASN HCHASN	12000	C 1 E	4	0	14
CV	41	81	RO	10/12/80-10/12/81	YLBECN HALAM	396045	C 1 W	40312875		16
CV	43	78	RO	11/30/77-11/29/78	YLBECN HALAM	342067	C24 W	40283915		15
CGN	37	81	RO	1/ 2/81- 3/ 5/82	YNORVA HNORVA	278000	C13 E	10239080		11
CGN	38	79	RA	8/ 3/79-10/ 2/79	YNORVA HNORVA	12000	C 1 E	4	8160	7
CGN	38	82	RO	7/ 1/82- 9/ 2/83	YNORVA HNORVA	278000	C13 E	10252979		13
CGN	39	78	PS	6/26/78-10/25/78	YNORVA HNORVA	35000	C 1 E	3	35000	4
CGN	40	79	PS	7/16/79-11/16/79	YNORVA HNORVA	45000	C 1 E	3	45000	6
CGN	41	81	PS	12/15/80- 3/20/81	YNORVA HNORVA	45000	C 1 E	3	45000	10
CV	59	80	RA	5/ 3/80- 7/29/80	YNORVA HNORVA	60000	C17 E	42	34200	9
CV	59	82	RA	10/ 1/81- 1/ 1/82	YNORVA HNORVA	60000	C17 E	43	33599	12
CV	60	79	RO	4/20/79-12/ 1/79	YNORVA HMAIPT	240000	C23 E	60127199		5
CV	62	78	RO	11/21/77-10/19/78	YNORVA HNORVA	346352	C23 E	40204347		3
CV	62	79	RA	9/ 1/79-11/26/79	YNORVA HNORVA	69170	C17 E	41	40118	8
CGN	9	79	C	4/ 1/79- 4/ 1/82	YPUGET HLBECH	739000	C 9 W	30739000		21
CGN	25	79	RA	1/15/79- 3/15/79	YPUGET HLBECH	30000	C 1 W	24	23999	18
CGN	25	82	RO	6/ 1/82- 8/ 1/83	YPUGET HLBECH	298507	C19 W	30256716		25
CGN	35	79	RA	1/15/79- 3/15/79	YPUGET HSD	12000	C 1 W	11	0	20
CGN	35	81	RO	6/ 1/81- 8/ 1/82	YPUGET HSD	298507	C19 W	20256716		24
CGN	36	79	RA	1/15/79- 4/16/79	YPUGET HLBECH	47204	C 1 W	4	35875	19
CGN	36	80	RO	4/14/80- 6/14/81	YPUGET HLBECH	278550	C 9 W	10239553		23
CGN	39	79	RA	7/15/79- 9/15/79	YPUGET HSD	12000	C 1 W	4	0	22
CV	41	79	RA	11/10/78- 1/11/79	YPUGET HALAM	40000	C17 W	36	20799	17
CGN	40	79	FO	11/ 6/78- 1/ 5/79	YSNEWS HD 05	6000	C 1 E	2	6000	1
CGN	41	80	FO	3/17/80- 5/16/80	YSNEWS HD 05	5000	C 1 E	2	5000	2

Unit 9 (output) - Renumbered Common Overhaul File

COMMON OVERHAUL FILE 07/22/78										
CGN	40	82	RA	5/ 1/82- 7/ 1/82	YCHASN HCHASN	12000	C 1 E	4	0	1
CV	41	81	RO	10/12/80-10/12/81	YLBECN HALAM	396045	C 1 W	40312875		2
CV	43	78	RO	11/30/77-11/29/78	YLBECN HALAM	342067	C24 W	40283915		3
CGN	37	81	RO	1/ 2/81- 3/ 5/82	YNORVA HNORVA	278000	C13 E	10239080		4
CGN	38	79	RA	8/ 3/79-10/ 2/79	YNORVA HNORVA	12000	C 1 E	4	8160	5
CGN	38	82	RO	7/ 1/82- 9/ 2/83	YNORVA HNORVA	278000	C13 E	10252979		6
CGN	39	78	PS	6/26/78-10/25/78	YNORVA HNORVA	35000	C 1 E	3	35000	7
CGN	40	79	PS	7/16/79-11/16/79	YNORVA HNORVA	45000	C 1 E	3	45000	8
CGN	41	81	PS	12/15/80- 3/20/81	YNORVA HNORVA	45000	C 1 E	3	45000	9
CV	59	80	RA	5/ 3/80- 7/29/80	YNORVA HNORVA	60000	C17 E	42	34200	10
CV	59	82	RA	10/ 1/81- 1/ 1/82	YNORVA HNORVA	60000	C17 E	43	33599	11
CV	60	79	RO	4/20/79-12/ 1/79	YNORVA HMAIPT	240000	C23 E	60127199		12
CV	62	78	RO	11/21/77-10/19/78	YNORVA HNORVA	346352	C23 E	40204347		13
CV	62	79	RA	9/ 1/79-11/26/79	YNORVA HNORVA	69170	C17 E	41	40118	14
CGN	9	79	C	4/ 1/79- 4/ 1/82	YPUGET HLBECH	739000	C 9 W	30739000		15
CGN	25	79	RA	1/15/79- 3/15/79	YPUGET HLBECH	30000	C 1 W	24	23999	16
CGN	25	82	RO	6/ 1/82- 8/ 1/83	YPUGET HLBECH	298507	C19 W	30256716		17
CGN	35	79	RA	1/15/79- 3/15/79	YPUGET HSD	12000	C 1 W	11	0	18
CGN	35	81	RO	6/ 1/81- 8/ 1/82	YPUGET HSD	298507	C19 W	20256716		19
CGN	36	79	RA	1/15/79- 4/16/79	YPUGET HLBECH	47204	C 1 W	4	35875	20
CGN	36	80	RO	4/14/80- 6/14/81	YPUGET HLBECH	278550	C 9 W	10239553		21
CGN	39	79	RA	7/15/79- 9/15/79	YPUGET HSD	12000	C 1 W	4	0	22
CV	41	79	RA	11/10/78- 1/11/79	YPUGET HALAM	40000	C17 W	36	20799	23
CGN	40	79	FO	11/ 6/78- 1/ 5/79	YSNEWS HD 05	6000	C 1 E	2	6000	24
CGN	41	80	FO	3/17/80- 5/16/80	YSNEWS HD 05	5000	C 1 E	2	5000	25

Unit 6 - Printed Output

COMMON OVERHAUL FILE: 07/22/78

YARD: CHASN

SHIP	FY	TW#	TW	AVAILABILITY DATES	YARD	HOME/PORT	MANDAYS	LDH	FLEET	QUIT	SOURCE	TYCOM	SEQ	REP.	MD.
1. CGN	40	82	RA	5/ 1/82- 7/ 1/82	CHASN	CHASN	12000	1	E				4		0

COMMON OVERHAUL FILE: 07/22/78

YARD: LBECH

SHIP	FY	TW#	TW	AVAILABILITY DATES	YARD	HOME/PORT	MANDAYS	LDH	FLEET	QUIT	SOURCE	TYCOM	SEQ	REP.	MD.
2. CV	41	81	RO	10/12/80-10/12/81	LBECH	ALAM	396045	1	W				40	312875	
3. CV	43	78	RO	11/30/77-11/29/78	LBECH	ALAM	342067	24	W				40	283915	

COMMON OVERHAUL FILE: 07/22/78

YARD: NORVA

SHIP	FY	TW	TW	AVAILABILITY DATES	YARD	HOMEPORT	MANDAYS	LDH	FLEET	QUIT	SOURCE	TYCOM	SEQ	REP. MD.
4. CGN 37	81		RO	1/ 2/81- 3/ 5/82	NORVA	NORVA	278000	13	E				10	239080
5. CGN 38	79		RA	8/ 3/79-10/ 2/79	NORVA	NORVA	12000	1	E				4	8160
6. CGN 38	82		RO	7/ 1/82- 9/ 2/83	NORVA	NORVA	278000	13	E				10	252979
7. CGN 39	78		PS	6/26/78-10/25/78	NORVA	NORVA	35000	1	E				3	35000
8. CGN 40	79		PS	7/16/79-11/16/79	NORVA	NORVA	45000	1	E				3	45000
9. CGN 41	81		PS	12/15/80- 3/20/81	NORVA	NORVA	45000	1	E				3	45000
10. CV 59	80		RA	5/ 3/80- 7/29/80	NORVA	NORVA	60000	17	E				42	34200
11. CV 59	82		RA	10/ 1/81- 1/ 1/82	NORVA	NORVA	60000	17	E				43	33599
12. CV 60	79		RO	4/20/79-12/ 1/79	NORVA	MA/PT	240000	23	E				60	127199
13. CV 62	78		RO	11/21/77-10/19/78	NORVA	NORVA	346352	23	E				40	204347
14. CV 62	79		RA	9/ 1/79-11/26/79	NORVA	NORVA	69170	17	E				41	40118

COMMON OVERHAUL FILE: 07/22/78

YARD: PUGET

SHIP	FY	TW	TW	AVAILABILITY DATES	YARD	HOMEPORT	MANDAYS	LDH	FLEET	QUIT	SOURCE	TYCOM	SEQ	REP. MD.
15. CGN 9	79		C	4/ 1/79- 4/ 1/82	PUGET	LBECCH	739000	9	W				30	739000
16. CGN 25	79		RA	1/15/79- 3/15/79	PUGET	LBECCH	30000	1	W				24	23999
17. CGN 25	82		RO	6/ 1/82- 8/ 1/83	PUGET	LBECCH	298507	19	W				30	256716
18. CGN 35	79		RA	1/15/79- 3/15/79	PUGET	SD	12000	1	W				11	0
19. CGN 35	81		RO	6/ 1/81- 8/ 1/82	PUGET	SD	298507	19	W				20	256716
20. CGN 36	79		RA	1/15/79- 4/16/79	PUGET	LBECCH	47204	1	W				4	35875
21. CGN 36	80		RO	4/14/80- 6/14/81	PUGET	LBECCH	278550	9	W				10	239563
22. CGN 39	79		RA	7/15/79- 9/15/79	PUGET	SD	12000	1	W				4	0
23. CV 41	79		RA	11/10/78- 1/11/79	PUGET	ALAM	40000	17	W				36	20799

COMMON OVERHAUL FILE: 07/22/78

YARD: SNEWS

SHIP	FY	TW#	TW	AVAILABILITY DATES	YARD	HOMEPORT	MANDAYS	LDH	FLEET	QUIT	SOURCE	TYCOM	SEQ	REP.	MD.
----	--	---	--	-----	----	-----	-----	---	----	----	-----	-----	---	---	----
24. CGN 40 79			FO	11/ 6/78- 1/ 5/79	SNEWS	D 05	6000	1	E				2	2	6000
25. CGN 41 80			FO	3/17/80- 5/16/80	SNEWS	D 05	5000	1	E				2	2	5000

PROGRAM UPCOF

DESCRIPTION

Updates to the Common Overhaul File (COF) are made by the UPCOF program. Permissible update operations include modification of existing COF records, deletion of records, and addition of new records to the file. Records to be changed or deleted are specified (on the update cards) by ship type, hull number, and sequence number. The COF is searched for a match in these parameters and the matching record is deleted or changed.

All the information necessary to accomplish an update operation is specified on a single card. An update code in column 5 of the card indicates the nature of the update. The following codes are permissible:

<u>Update Code</u>	<u>Update Operation</u>
A	Add record to file
D	Delete record from file
C or Δ	Change record on file

The format of the update cards is the same as that of the LRPS Run File records (with the record number omitted). For the deletion operation, the user need specify only the ship type, hull number, and sequence number of the availability to be deleted. For the change operation, the user must specify these three parameters and must fill in any fields which are to be changed. Note that the change operation is performed on a field-by-field basis; only those fields which are to be changed need be specified. All others will remain as they are on the file.

The update cards for deletions and changes must be in the same order as the records on the COF. The COF is sorted first by overhaul yard, then by ship type, then by hull number, and finally by sequence number. Comment cards (i.e., cards with an asterisk in column 1) may be used to separate update cards for the various yards.

The final update operation, the addition of new records to the file, is accomplished through the "add" update card. Add cards may be placed at any point in the update deck - the program places them on a temporary file and, after all change and delete operations have been successfully completed, transfers the added records to the end of the COF. Note that all fields of an add card should be filled in.

The run set-up for the UPCOF program is in two parts. The first part performs the updates and places the updated version of the file onto a backup file. The original COF is, at this point, unchanged. The user then has the opportunity to examine the output of UPCOF to determine whether he is satisfied with the results of the update. If he is satisfied, he then runs the second part of the update set-up. This part interchanges the contents of the COF and the backup file so that the COF contains the updated version and the backup, the original version. The COF is then sorted and printed out. If the user was not satisfied with the first part of the update, he merely changes the update cards and re-runs the program with the first run set-up.

Figure 2 presents the hierarchical diagram of the UPCOF program.

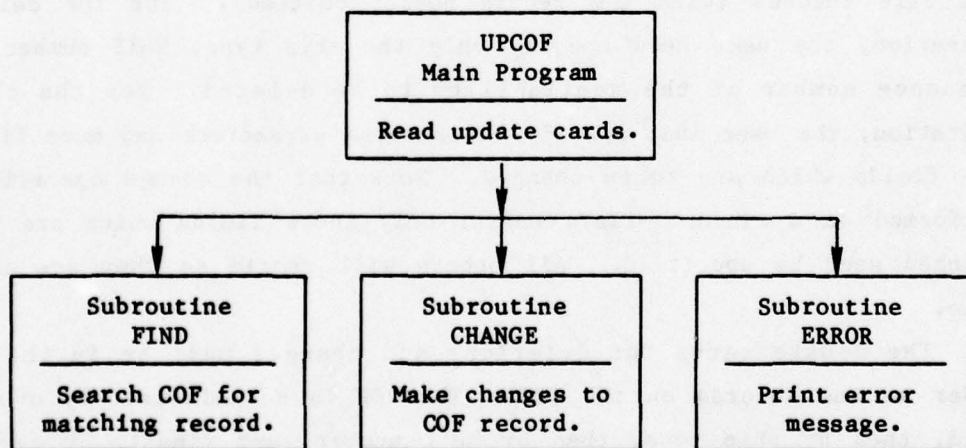


Figure 2 - Hierarchical Diagram of the UPCOF Program

RUN SET-UPS

The following set-ups are used in the updating process:

Part 1 - Update onto backup file.

```
//NVSUPCOF JOB (XXXXXXXXXX,XXXXX),USER,CLASS=C,TIME=(,10),MSGLEVEL=1
//JOB LIB DD DSN=NVS01.MISC.LIB,DISP=SHR

// EXEC PGM=UPCOF                                (EXECUTE PROGRAM UPCOF)
//GO.FT06F001 DD SYSOUT=A                        (LIST OF UPDATES PERFORMED)
//GO.FT04F001 DD *                               (UPDATE CARDS)
```

UPCOF CARD INPUTS

```
//GO.FT01F001 DD DSN={COMMON OVERHAUL FILE},DISP=SHR      (INPUT FILE)
//GO.FT07F001 DD DSN={BACKUP COF},DISP=SHR                (OUTPUT FILE)
//GO.FT08F001 DD DSN=&&TEMP,DISP=(NEW,DELETE),UNIT=SYSDA,  (I/O FILE)
// SPACE=(800,200),DCB=(LRECL=80,RECFM=FB,BLKSIZE=800)
```

Part 2 - Interchange contents of COF and backup and print updated COF.

```
//NVSOKCOF JOB (XXXXXXXXXX,XXXXX),USER,CLASS=C,TIME=(,10),MSGLEVEL=1
//JOB LIB DD DSN=NVS01.MISC.LIB,DISP=SHR

// EXEC SDA                                        (SORT COMMON OVERHAUL FILE)
//SORTIN DD DSN={BACKUP COF},DISP=SHR
//SORTOUT DD DSN=&&TEMP,DISP=(,PASS),UNIT=SYSDA,
// SPACE=(800,200),DCB=(LRECL=80,RECFM=FB,BLKSIZE=800)
//SYSIN DD * (SORT BY YARD, SHIP, AND SEQUENCE NUMBER)
SORT FIELDS=(37,5,A,1,8,A,67,4,A),FORMAT=CH

// EXEC PGM=IEBGENER                                (COPY LRCF TO LRCF.BACKUP)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN={COMMON OVERHAUL FILE},DISP=SHR
//SYSUT2 DD DSN={BACKUP COF},DISP=SHR

// EXEC PGM=PRCOF                                (EXECUTE PROGRAM PRCOF)
//GO.FT05F001 DD *                                (NO CARD INPUTS)
//GO.FT06F001 DD SYSOUT=A                        (FORMATTED PRINTOUT OF COMMON FILE)
//GO.FT08F001 DD DSN=&&TEMP,DISP=(OLD,DELETE)      (INPUT FILE)
//GO.FT09F001 DD DSN={COMMON OVERHAUL FILE},DISP=SHR (OUTPUT FILE)
```

INPUT/OUTPUT

The following units are used by the UPCOF program:

- Unit 1 - input - Common Overhaul File (COF)
- Unit 4 - input - Card inputs giving updates to be performed
- Unit 6 - output - Printout of updates performed
- Unit 7 - output - Updated COF (unsorted)
- Unit 8 - I/O - Temporary file of new records.

An example of the unit 6 printout is given on pages 68 - 69.

"UPCOF" CARD INPUT

(Unit 4)

Run Date Card

CARD		FIELD CONTENTS	
COLUMN	FORMAT		
1	"R"		
	"U"		
	"N"		
	"D"		
	"A"		
	"T"		
	"E"		
	":"		
10			
11	I2	Month	Run date
13	"/"		
	I2	Day	
16	"/"		
18	I2	Year	

Update Cards. An update card is required for every record to be changed, deleted, or added to the COF. The basic format of the update card is the same as that of the LRPS Run File record - with the record number omitted. A code has been added to indicate the type of update operation to be performed. If the update code is "C" (change) or blank, the existing COF record with the ship type, hull number, and sequence number indicated on the update card is modified. In this case, only the records to be modified need be specified - all others will remain unchanged. If the update code is "D" (delete), the existing COF record with the ship type, hull number, and sequence number indicated on the update card is deleted from the COF.

Update Cards (continued)

Change and delete update cards must be in the same order as the records on the COF*, since searching the COF for a match begins with the next record on the COF following the one specified by the last deletion or change operation.

If the update code is "A" (add), a new record is added to the COF (and is placed at the end of the file). Add cards may appear at any point in the update deck. They need not be grouped together.

CARD COLUMN	FORMAT	FIELD CONTENTS
1		
	A4	Ship type
4		
	1X	Update code ("C" or blank, "D", or "A")
6		
	I4	Hull number
9		
	2X	
12		
	A5	Homeport
16		
17		
18	I2	Month of availability start date
	"/"	
20		
21	I2	Day of availability start date
	"/"	
23		
24	I2	Year of availability start date
25		
26	I2	Month of availability end date
	"/"	
28		
29	I2	Day of availability end date
	"/"	
31		
32	I2	Year of availability end date

*The COF is sorted first by shipyard, then by ship type, then by hull number, and finally by sequence number.

Update Cards (continued)

CARD COLUMN	FORMAT	FIELD CONTENTS
33	I4	Sequence number
36		
37	I2	Priority
38		
39	I2	Dock class
40		
41	A1	Inact. marker
42	I2	Labor distribution histogram
43		
44	A5	Overhaul yard
48		
49		
	I3	Start restraint
51		
52	I3	End restraint
54		
55	I4	Dock time
58	1X	
60	I7	Mandays (production shop productive)
66	A3	Type of work
67		
69	A3	Specialization category
70		
72	A1	Yard ownership ("N" or "P")
73	A1	Coast ("E" or "W")
74	I3	Percent alterations
75		
77	2X	
80	I1	Type select

Comment Card. Comment cards may be interspersed among the update cards. They are printed out on the output of the UPCOF program.

CARD		FIELD CONTENTS
COLUMN	FORMAT	
1	"*"	
2		
.		.
.	A79	Comment
.		.
80		

COMMON OVERHAUL FILE

(Unit 1 - "UPCOF" Input and Unit 7 - "UPCOF" Output)

Header Record (one record)

RECORD		FIELD CONTENTS	
POS	FORMAT		
1			
.		.	.
.	16X	.	.
.		.	.
16			
17	"C"		
	"O"		
	"M"		
	"M"		
	"O"		
	"N"		
	"O"		
	"V"		
	"E"		
	"R"		
	"H"		
	"A"		
	"U"		
	"L"		
	"F"		
	"I"		
	"L"		
36	"E"		
	4X		
41	I2	Month	File preparation date
43	"/"		
	I2	Day	
46	"/"		
48	I2	Year	

Availability Records (one for each availability)

RECORD POS.	FORMAT	FIELD CONTENTS	
1			
	A4	Ship type	
4			
5			
	I4	Hull number	
8			
	1X		
10			
11	I2	Fiscal year of start of availability	
12			
13	I2	Type of work (numeric)	
14			
	A3	Type of work (alpha)	
16			
	1X		
18	I2	Month	Availability start date
20	"/"		
	I2	Day	
23	"/"		
	I2	Year	Availability end date
25			
26	"_"		
27	I2	Month	
29	"/"		Availability end date
	I2	Day	
32	"/"		
34	I2	Year	
	1X		
36	"Y"		
37			
	A5	Overhaul yard	
41			
42	1X		

Availability Records (continued)

RECORD POS.	FORMAT	FIELD CONTENTS
43	"H"	
44		
	A5	Homeport
48		
	1X	
50		
	I7	Mandays (PSP)
56		
	1X	
58	"C"	
59		
60	I2	Labor distribution histogram
	1X	
62	A1	Fleet ("A" or "P")
63	A1	Inact. marker
	1X	
65	A1	Source of data
66	I1	Type commander indicator
67		
	I4	Sequence number
70		
71		
	I6	Mandays (PSP) for repair work
76		
77		
	I4	Record number
80		

LISTING OF PROGRAM

```

C*****PROGRAM UPCOF(INPUT,OUTPUT,TAPE4=INPUT,TAPE6=OUTPUT,TAPE1,TAPE7,
C*****  TAPE8)
C
C
C UPCOF (UPDATE COMMON OVERHAUL FILE) IS CAPABLE OF PERFORMING THE
C FOLLOWING OPERATIONS:
C
C   - DELETE OR CHANGE PARTICULAR COF RECORDS.
C   - ADD NEW RECORDS TO THE COF.
C
C THE FORMAT FOR THE REPLACEMENT CARDS AND NEW-RECORD CARDS IS THE
C SAME AS THE LRPS RUN FILE RECORDS (WITH THE RECORD NUMBER OMITTED).
C THE CHANGE AND DELETE OPERATIONS ARE PERFORMED FIRST BY MATCHING
C THE SHIP TYPE, HULL NUMBER, AND SEQUENCE NUMBER INDICATED ON THE
C UPDATE CARD WITH THE CORRESPONDING RECORD ON THE COF. THESE CARDS
C MUST BE IN THE SAME ORDER AS THE RECORDS ON THE COF (NAMELY, BY YARD,
C SHIP TYPE, HULL NUMBER, AND SEQUENCE NUMBER). ADDITION UPDATE CARDS
C MAY BE PLACED ANYWHERE IN THE INPUT DECK.
C
C PRINTOUT OF THE PROGRAM CONSISTS OF A LIST OF ALL CHANGES,
C DELETIONS, AND ADDITIONS AND A NOTATION OF ANY ERRORS ENCOUNTERED.
C
C THE FOLLOWING UNITS ARE USED BY THE PROGRAM:
C
C   UNIT 1 - INPUT - COMMON OVERHAUL FILE (COF)
C   UNIT 4 - INPUT - CARD INPUTS (UPDATES TO BE PERFORMED)
C   UNIT 6 - OUTPUT - PRINTOUT OF UPDATES PERFORMED
C   UNIT 7 - OUTPUT - UPDATED COF (UNSORTED)
C   UNIT 8 - I/O - TEMPORARY FILE OF ADDED RECORDS.
C
C PROGRAMMED BY LINDA L. LAMATRICE, DTNSRDC, CODE 187 (MAY 1978).
C
C -----
C
C   REAL*8 RUNID,FILEID,FIELD,PROPT,DATA,UNDER
C
C   INTEGER HULLUP
C
C   DIMENSION UNDER(22),DATA(22),FIELD(26),PROPT(2,5),CARD(20)
C
C   DATA BLANK/1H /,DEL,CHG,ADD/1H0,1HC,1HA/, AST/1H*/ ,
C     RBLANK/1H /, PROPT/7HDELETE ,7HRECORD:,8HCHANGE -.6H FROM:,
C     1H ,1H ,8H -.6H-- TO:,8HADD RECO,3HRD:/, IEOF4/0/,
C     IADD/0/
C
C -----
C
C READ RUN DATE CARD. -----
C*****CALL ERRSET(NERR,99)
C   READ (4,100) RUNID
C   100 FORMAT (10X,A8)
C   WRITE (7,110) RUNID
C   110 FORMAT (16X,21HCOMMON OVERHAUL FILE ,3X,A8,31X,1H0)
C   READ (1,110) FILEID
C   WRITE (6,120)
C   120 FORMAT (1H1)
C   WRITE (6,130) RUNID,FILEID
C   130 FORMAT (5X,10HRUN DATE: ,A8/5X,18(1H-))//
C     5X,22HUPDATES TO COF DATED: ,A8/5X,30(1H-))///
C   LINE=7

```

```

**** 10
**** 20
UPCO 30
UPCO 40
UPCO 50
UPCO 60
UPCO 70
UPCO 80
UPCO 90
UPCO 100
UPCO 110
UPCO 120
UPCO 130
UPCO 140
UPCO 150
UPCO 160
UPCO 170
UPCO 180
UPCO 190
UPCO 200
UPCO 210
UPCO 220
UPCO 230
UPCO 240
UPCO 250
UPCO 260
UPCO 270
UPCO 280
UPCO 290
UPCO 300
UPCO 310
UPCO 320
UPCO 330
UPCO 340
**** 350
UPCO 360
UPCO 370
UPCO 380
UPCO 390
UPCO 400
UPCO 410
UPCO 420
UPCO 430
UPCO 435
UPCO 440
UPCO 450
UPCO 460
UPCO 470
UPCO 480
**** 490
UPCO 500
UPCO 510
UPCO 520
UPCO 530
UPCO 540
UPCO 550
UPCO 560
UPCO 570
UPCO 580
UPCO 590
UPCO 600

```

C		UPCO 610
C	READ NEXT UPDATE CARD. -----	UPCO 620
	IER=0	UPCO 630
	150 DO 160 I=1,22	UPCO 640
	160 UNDER(I)=RBLANK	UPCO 650
	170 READ (4,180,END=350) FIRST,(FIELD(I),I=1,25)	**** 660
C=170	READ (4,180) FIRST,(FIELD(I),I=1,25)	**** 670
	180 FORMAT (A1,T1,A4,1X,A4,2X,A5,2(A2,1X),A2,2(A2,1X),A2,A4,2A2,	UPCO 680
	. A1,A2,A5,2A3,A4,1X,A7,2A3,2A1,A3,2X,A1)	UPCO 690
C=****	IF (EOF(4).NE.0.0) GO TO 350	**** 700
	IF (FIRST.EQ.AST) GO TO 440	UPCO 710
	BACKSPACE 4	UPCO 720
	READ (4,190) SHIPUP,OPER,HULLUP,ISEQUP,MANDAY,IPCTA	UPCO 730
	190 FORMAT (A4,A1,I4,T33,I4,T60,I7,T75,I3)	UPCO 740
C		UPCO 750
C	OPERATION IS DELETE. -----	UPCO 760
	IF (OPER.NE.DEL) GO TO 250	UPCO 770
	CALL FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA,MANDAY,MDREP)	UPCO 780
	IF (IER.NE.0) GO TO 410	UPCO 790
200	LINE=LINE+1	UPCO 800
	IF (LINE.LT.55) GO TO 210	UPCO 810
	LINE=1	UPCO 820
	WRITE (6,120)	UPCO 830
210	WRITE (6,220) (PROPT(I,1),I=1,2),DATA	UPCO 840
220	FORMAT (5X,2A8,2A4,1X,2A2,A3,1X,2(A2,1H/),A2,1H-,2(A2,1H/),A2,	UPCO 850
	. 2H Y,A5,2H H,A5,1X,A7,2H C,A2,2(1X,2A1),A4,A6,A4,T92,I6)	UPCO 860
	WRITE (6,330)	UPCO 870
	LINE=LINE+2	UPCO 890
	GO TO 170	UPCO 900
C		UPCO 910
C	OPERATION IS CHANGE. -----	UPCO 920
250	IF (OPER.EQ.ADD) GO TO 300	UPCO 930
	CALL FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA,MANDAY,MDREP)	UPCO 940
	IF (IER.NE.0) GO TO 410	UPCO 950
	WRITE (6,330)	UPCO 955
	IF (LINE.LT.53) GO TO 270	UPCO 960
	LINE=5	UPCO 970
	WRITE (6,120)	UPCO 980
270	WRITE (6,220) (PROPT(I,2),I=1,2),DATA	UPCO 990
	CALL CHANGE(0,DATA,FIELD,UNDER,MANDAY,IPCTA,MDREP)	UPCO1000
	WRITE (6,275) (PROPT(I,3),I=1,2),UNDER	UPCO1010
275	FORMAT (5X,2A8,2A4,1X,2A2,A3,1X,2(A2,1H),A2,1H,2(A2,1H),A2,	UPCO1020
	. 2H ,A5,2H ,A5,1X,A7,2H ,A2,2(1X,2A1),A4,A6,A4)	UPCO1030
	WRITE (6,220) (PROPT(I,4),I=1,2),DATA,MDREP	UPCO1040
	WRITE (6,330)	UPCO1050
	LINE=LINE+5	UPCO1060
	GO TO 150	UPCO1070
C		UPCO1080
C	OPERATION IS ADD. -----	UPCO1090
300	CALL CHANGE(1,DATA,FIELD,UNDER,MANDAY,IPCTA,MDREP)	UPCO1100
	IADD=1	UPCO1105
	IF (LINE.LT.58) GO TO 320	UPCO1110
	LINE=0	UPCO1120
	WRITE (6,120)	UPCO1130
320	WRITE (6,220) (PROPT(I,5),I=1,2),DATA,MDREP	UPCO1140
	WRITE (6,330)	UPCO1150
330	FORMAT (1X)	UPCO1160
	LINE=LINE+2	UPCO1170
	GO TO 170	UPCO1180
C		UPCO1190
C	TRANSFER NEW RECORDS TO COF. -----	UPCO1200
350	IER=1	UPCO1210
	CALL FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA,MANDAY,MDREP)	UPCO1220


```

      IF (IADD.EQ.0) STOP
      REWIND 8
    360 READ (8,370,END=420) CARD
    C*360 READ (8,370) CARD
    C*****IF (EOF(8).NE.0.0) GO TO 420
    370 FORMAT (20A4)
      WRITE (7,370) CARD
      GO TO 360

```

```

C
C PROCESS ERRORS. -----
    410 CALL ERROR(LINE,OPER,SHIPUP,HULLUP,ISEQUP)
    420 STOP

```

```

C
C WRITE COMMENT. -----
    440 BACKSPACE 4
      READ (4,450) CARD
    450 FORMAT (1X,19A4,A3)
      IF (LINE.LT.55) GO TO 460
      LINE=1
      WRITE (6,120)
    460 WRITE (6,470) CARD
    470 FORMAT(1H0,20X,20A4)
      WRITE (6,330)
      LINE=LINE+3
      GO TO 170
    END

```

```

UPC01225
UPC01230
****1240
****1250
****1260
UPC01270
UPC01280
UPC01290
UPC01300
UPC01310
UPC01320
UPC01330
UPC01340
UPC01350
UPC01360
UPC01370
UPC01380
UPC01400
UPC01410
UPC01420
UPC01430
UPC01440
UPC01450
UPC01460
UPC01470
UPC01480

```

```

SUBROUTINE CHANGE (ICHG,DATA,FIELD,UNDER,MANDAY,IPCTA,MDREP)
C
C SUBROUTINE CHANGE EXAMINES EACH DATA POINT OF THE DATA ARRAY AND THE
C CORRESPONDING ELEMENT OF THE FIELD ARRAY TO DETERMINE WHETHER OR NOT
C THE ELEMENT IS TO BE CHANGED. IF THE FIELD ARRAY ELEMENT IS BLANK,
C THE APPROPRIATE DATA ARRAY ELEMENT IS NOT CHANGED. IF THE FIELD
C ARRAY ELEMENT IS NOT BLANK, THE DATA ARRAY ELEMENT IS SET EQUAL
C TO THE FIELD ARRAY ELEMENT.
C
C NOTE THAT THE DATA ARRAY CONTAINS THE VARIABLES OF THE COF. IN THE
C SAME ORDER AS THEY APPEAR ON THE COF RECORDS. THE FIELD ARRAY
C CONTAINS VARIABLES IN THE ORDER OF THE LRPS RUN FILE RECORDS.
C
C SUBROUTINE CHANGE IS ALSO USED (IF ICHG.NE.0) DURING THE ADD OPERA-
C TION TO TRANSFER NEW-RECORD INFORMATION FROM THE FIELD ARRAY TO THE
C PROPER POSITION IN THE DATA ARRAY.
C
C THE FOLLOWING TABLE INDICATES THE SUBSCRIPTS OF THE DATA AND FIELD
C ARRAYS FOR THE VARIOUS PARAMETERS.
C


| PARAMETER         | FIELD<br>ARRAY | DATA<br>ARRAY |
|-------------------|----------------|---------------|
| SHIP TYPE         | 1              | 1             |
| HULL NUMBER       | 2              | 2             |
| HOMEPORT          | 3              | 13            |
| AVAIL. START DATE |                |               |
| MONTH             | 4              | 6             |
| DAY               | 5              | 7             |
| AVAIL. END DATE   |                |               |
| MONTH             | 7              | 9             |
| DAY               | 8              | 10            |
| YEAR              | 9              | 11            |
| SEQUENCE NUMBER   | 10             | 20            |
| PRIORITY          | 11             |               |
| DOCK CLASS        | 12             |               |
| INACT. MARKER     | 13             | 17            |
| LDM               | 14             | 15            |
| SHIPPYARD         | 15             | 12            |


C
C-----
C
REAL*8 DATA,FIELD,UNDER,RBLANK,HATS
C
DIMENSION DATA(22),FIELD(26),UNDER(22),ISUB(21)
C*****DATA RBLANK,HATS/1H ,BH#####/,
DATA RBLANK,HATS/1H ,BH;;;;;;;;;/,
ISUB/1,2,26,26,20,4,5,6,7,8,9,15,3,19,14,23,13,26,26,10,24/
C-----
C
UNDER(22)=RBLANK
FIELD(26)=RBLANK
DO 110 I=1,21
J=ISUB(I)
IF (ICHG.NE.0) GO TO 100
UNDER(I)=RBLANK
IF (FIELD(J).EQ.RBLANK) GO TO 110
UNDER(I)=HATS

```

100 DATA(I)=FIELD(J)	CHAN 640
110 CONTINUE	CHAN 650
C	CHAN 660
UNDER(1) =RBLANK	CHAN 670
UNDER(2) =RBLANK	CHAN 680
UNDER(20)=RBLANK	CHAN 690
J=7	CHAN 700
IF (ICMG.EQ.0) GO TO 120	CHAN 710
DATA(22)=RBLANK	CHAN 720
J=8	CHAN 730
120 DATA(21)=RBLANK	CHAN 740
IF (FIELD(24).EQ.RBLANK) GO TO 150	CHAN 750
MDREP=FLOAT(MANDAY)*(1.0 - FLOAT(IPCTA)/100.0) + 0.5	CHAN 760
C	CHAN 770
C WRITE NEW COF RECORD. -----	CHAN 780
150 WRITE (J,160) DATA,MDREP	CHAN 790
160 FORMAT (2A4,1X,2A2,A3,1X,2(A2,1H/),A2,1H-,2(A2,1H/),A2,	CHAN 800
2H Y,A5,2H M,A5,1X,A7,2H C,A2,2(1X,2A1),A4,A6,A4,T71,I6)	CHAN 810
RETURN	CHAN 820
END	CHAN 830

	SUBROUTINE ERROR(LINE,OPER,SHIPUP,HULLUP,ISEQU)	ERRO 10
C		ERRO 20
C		ERRO 30
C	SUBROUTINE ERROR IS CALLED WHEN THERE IS NO-MATCH ON THE CURRENT	ERRO 40
C	AVAILABILITY. ERROR PRINTS A MESSAGE DESCRIBING THE ERROR.	ERRO 50
C		ERRO 60
C		ERRO 70
C	INTEGER HULLUP	ERRO 80
C		ERRO 90
C	DIMENSION DATA(20)	ERRO 100
C		ERRO 110
C	DATA AST/1H*/	ERRO 120
C	-----	ERRO 130
C		ERRO 140
	IF (LINE.LT.51) GO TO 110	ERRO 150
	LINE=0	ERRO 160
	WRITE (6,100)	ERRO 170
100	FORMAT (1H1)	ERRO 180
110	LINE=LINE+5	ERRO 190
	WRITE (6,120)	ERRO 200
120	FORMAT (5X,87A1)	ERRO 210
	WRITE (6,120) (AST,I=1,87),AST	ERRO 220
	WRITE (6,140) OPER,SHIPUP,HULLUP,ISEQU	ERRO 230
140	FORMAT (5X,43H* NO-MATCH ON COMMON FILE FOR AVAILABILITY,	ERRO 240
	. 33H INDICATED BY THIS UPDATE CARD: ,A1,3H - ,A4,2I4/5X,1H*/	ERRO 250
	. 5X,46H* REMAINING UPDATE CARDS CANNOT BE PROCESSED:/5X,1H*)	ERRO 260
150	READ (4,155,END=190) DATA	ERRO 270
C*150	READ (4,155) DATA	**** 280
155	FORMAT (20A4)	**** 290
C*****	IF (EOF(4).NE.0.0) GO TO 190	ERRO 300
160	IF (LINE.LT.58) GO TO 165	**** 310
	WRITE (6,100)	ERRO 320
	LINE=0	ERRO 330
165	WRITE (6,170) DATA	ERRO 340
170	FORMAT (5X,1H*,5X,20A4)	ERRO 350
	LINE=LINE+1	ERRO 360
	GO TO 150	ERRO 370
C		ERRO 380
190	WRITE (6,120) (AST,I=1,87)	ERRO 390
	WRITE (6,200)	ERRO 400
200	FORMAT (1H0)	ERRO 410
	LINE=LINE+3	ERRO 420
	RETURN	ERRO 430
	END	ERRO 440
		ERRO 450

SUBROUTINE FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA,MANDAY,MDREP)	FIND 10
C	FIND 20
C	FIND 30
C SUBROUTINE FIND READS RECORDS FROM UNIT 1 AND COPIES THEM ONTO UNIT 7	FIND 40
C UNTIL A MATCH IS MADE ON SHIP TYPE (SHIPUP), HULL NUMBER (HULLUP), AND	FIND 50
C SEQUENCE NUMBER (ISEQUP). THE DATA FROM THE MATCHING RECORD IS	FIND 60
C RETURNED THROUGH THE DATA ARRAY AND THE VARIABLES MANDAY AND MDREP.	FIND 70
C	FIND 80
C IF AN END-OF-FILE IS ENCOUNTERED ON UNIT 7 BEFORE A MATCH IS FOUND,	FIND 90
C IER IS SET TO 1.	FIND 100
C	FIND 110
C	FIND 120
REAL*8 DATA	**** 130
C	FIND 140
INTEGER HULLUP	FIND 150
C	FIND 160
DIMENSION DATA(22)	FIND 170
C	FIND 180
C -----	FIND 190
C	FIND 200
MDNEW=MANDAY	FIND 210
100 READ (1,110,END=150) DATA,SHIP,IHULL,MANDAY,ISEQ,MDREP	**** 220
C*100 READ (1,110) DATA,SHIP,IHULL,MANDAY,ISEQ,MDREP	**** 230
110 FORMAT (2A4,1X,2A2,A3,1X,2(A2,1H/),A2,1H-,2(A2,1H/),A2,	FIND 240
2H Y,A5,2H H,A5,1X,A7,2H C,A2,2(1X,2A1),A4,A6,A4,	FIND 250
T1,A4,I4,T50,I7,T67,I4,I6)	FIND 260
C*****IF (EOF(1).NE.0.0) GO TO 150	**** 270
IF (IER.EQ.1) GO TO 120	FIND 280
IF (SHIP.EQ.SHIPUP .AND. IHULL.EQ.HULLUP .AND. ISEQ.EQ.ISEQUP)	FIND 290
GO TO 130	FIND 300
120 WRITE (7,110) DATA	FIND 310
GO TO 100	FIND 320
C	FIND 330
130 IF (MDNEW.GT.0) MANDAY=MDNEW	FIND 340
RETURN	FIND 350
C	FIND 360
150 IER=1	FIND 370
RETURN	FIND 380
END	FIND 390

SAMPLE RUN

The sample run of the UPCOF program uses, as its input file, the sorted COF produced by the PRCOF program. A listing of this file is given on page 44. This section provides listings of all other input/output units used in the sample run of UPCOF.

Unit 4 - Card Input

RUN DATE: 5/11/78

-----LBECH-----									
CV	C	41			40				21
-----NORVA-----									
CGN	A	37	NORVA	10/01/79	12/01/79	5	1	0	1
CGN	D	39							
CGN	D	40							
CGN	D	41							
CV	C	62	10	12	41				
-----PUGET-----									
CGN	C	35							18
CGN	C	39	10	12	4				26
-----SNEWS-----									
CGN	C	40	NORVA			2			5000
CGN	A	39	NORVA	09/01/82	11/01/83	10	1	0	13
CGN	41	NORVA				2			

Unit 6 - Printed Output

RUN DATE: 5/11/78

UPDATES TO COF DATED: 07/22/78

-----LBECH-----

CHANGE - FROM: CV 41 81 RO 10/12/80-10/12/81 YLBECH HALAM 396045 C 1 W 40312875 2
 --- TO: CV 41 81 RO 10/12/80-10/12/81 YLBECH HALAM 396045 C 1 W 40312876 2

-----NORVA-----

ADD RECORD: CGN 37 RA 10/01/79-12/01/79 YNORVA HNORVA 12000 C 1 E 5 10560
 DELETE RECORD: CGN 39 78 PS 6/26/78-10/25/78 YNORVA HNORVA 35000 C 1 E 3 35000 7
 DELETE RECORD: CGN 40 79 PS 7/16/79-11/16/79 YNORVA HNORVA 45000 C 1 E 3 45000 8
 DELETE RECORD: CGN 41 81 PS 12/15/80- 3/20/81 YNORVA HNORVA 45000 C 1 E 3 45000 9

CHANGE - FROM: CV 62 79 RA 9/ 1/79-11/26/79 YNORVA HNORVA 69170 C17 E 41 40118 14
 --- TO: CV 62 79 RA 10/ 1/79-12/26/79 YNORVA HNORVA 69170 C17 E 41 40118 14

-----PUGET-----

CHANGE - FROM: CGN 35 79 RA 1/15/79- 3/15/79 YPUGET HSD 12000 C 1 W 11 0 18
 --- TO: CGN 35 79 RA 1/15/79- 3/15/79 YPUGET HSD 12000 C 1 W 11 9840 18

CHANGE - FROM: CGN 39 79 RA 7/15/79- 9/15/79 YPUGET HSD 12000 C 1 W 4 0 22
 --- TO: CGN 39 79 RA 10/15/79-12/15/79 YPUGET HSD 12000 C 1 W 4 8880 22

-----SNEWS-----

CHANGE - FROM:	CGN	40 79	FO	11/ 6/78-	1/ 5/79	YSNEWS	HD 05	6000 C 1 E	2 6000	24
---	TO:	CGN	40 79	FO	11/ 6/78-	1/ 5/79	YSNEWS HNORVA	5000 C 1 E	2 6000	24
ADD RECORD:	CGN	39	RO	09/01/82-	11/01/83	YNORVA HNORVA	275000 C13 E		10214500	
CHANGE - FROM:	CGN	41 80	FO	3/17/80-	5/16/80	YSNEWS	HD 05	5000 C 1 E	2 5000	25
---	TO:	CGN	41 80	FO	3/17/80-	5/16/80	YSNEWS HNORVA	5000 C 1 E	2 5000	25

Unit 7 (output) - Updated Common Overhaul File (unsorted)

COMMON OVERHAUL FILE										5/11/78		
CGN	40	82	RA	5/ 1/82- 7/ 1/82	YCHASN	HCHASN	12000	C 1 E	4	0	0	
CV	41	81	RO	10/12/80-10/12/81	YLBECH	HALAM	396045	C 1 W	40312876		2	
CV	43	78	RO	11/30/77-11/29/78	YLBECH	HALAM	342067	C24 W	40283915		3	
CGN	37	81	RO	1/ 2/81- 3/ 5/82	YNORVA	HNORVA	278000	C13 E	10239080		4	
CGN	38	79	RA	8/ 3/79-10/ 2/79	YNORVA	HNORVA	12000	C 1 E	4	8160	5	
CGN	38	82	RO	7/ 1/82- 9/ 2/83	YNORVA	HNORVA	278000	C13 E	10252979		6	
CV	59	80	RA	5/ 3/80- 7/29/80	YNORVA	HNORVA	60000	C17 E	42	34200	10	
CV	59	82	RA	10/ 1/81- 1/ 1/82	YNORVA	HNORVA	60000	C17 E	43	33599	11	
CV	60	79	RO	4/20/79-12/ 1/79	YNORVA	HMAVPT	240000	C23 E	60127199		12	
CV	62	78	RO	11/21/77-10/19/78	YNORVA	HNORVA	346352	C23 E	40204347		13	
CV	62	79	RA	10/ 1/79-12/26/79	YNORVA	HNORVA	69170	C17 E	41	40118	14	
CGN	9	79	C	4/ 1/79- 4/ 1/82	YPUGET	HLBECH	739000	C 9 W	30739000		15	
CGN	25	79	RA	1/15/79- 3/15/79	YPUGET	HLBECH	30000	C 1 W	24	23999	16	
CGN	25	82	RO	6/ 1/82- 8/ 1/83	YPUGET	HLBECH	298507	C19 W	30256716		17	
CGN	35	79	RA	1/15/79- 3/15/79	YPUGET	HSD	12000	C 1 W	11	9840	18	
CGN	35	81	RO	6/ 1/81- 8/ 1/82	YPUGET	HSD	298507	C19 W	20256716		19	
CGN	36	79	RA	1/15/79- 4/16/79	YPUGET	HLBECH	47204	C 1 W	4	35875	20	
CGN	36	80	RO	4/14/80- 6/14/81	YPUGET	HLBECH	278550	C 9 W	10239553		21	
CGN	39	79	RA	10/15/79-12/15/79	YPUGET	HSD	12000	C 1 W	4	8880	22	
CV	41	79	RA	11/10/78- 1/11/79	YPUGET	HALAM	40000	C17 W	36	20799	23	
CGN	40	79	FO	11/ 6/78- 1/ 5/79	YSNEWS	HNORVA	5000	C 1 E	2	6000	24	
CGN	41	80	FO	3/17/80- 5/16/80	YSNEWS	HNORVA	5000	C 1 E	2	5000	25	
CGN	37		RA	10/01/79-12/01/79	YNORVA	HNORVA	12000	C 1 E	5	10560		
CGN	39		RO	09/01/82-11/01/83	YNORVA	HNORVA	275000	C13 E	10214500			

Unit 8 (input/output) - Temporary File of New Records

CGN	37	RA	10/01/79-12/01/79	YNORVA	HNORVA	12000	C 1 E	5	10560
CGN	39	RO	09/01/82-11/01/83	YNORVA	HNORVA	275000	C13 E	10214500	

PROGRAM UPRUN

DESCRIPTION

Updates to the LRPS Run Files are made by the UPRUN program. UPRUN updates only one Run File at a time. Permissible update operations include modification of existing Run File records, deletion of records, and addition of new records to the file. Records to be changed or deleted are specified (on the update cards) by ship type, hull number, and sequence number. The Run File is searched for a match in these parameters and the matching record is deleted or changed.

All the information necessary to accomplish an update operation is specified on a single card. An update code in column 5 of the card indicates the nature of the update. The following codes are permissible:

<u>Update Code</u>	<u>Update Operation</u>
A	Add record to file
D	Delete record from file
C or Δ	Change record on file

The format of the update cards is the same as that of the Run File records (with the record number omitted). For the deletion operation, the user need specify only the ship type, hull number, and sequence number of the availability to be deleted. For the change operation, the user must specify these three parameters and must fill in any fields which are to be changed. Note that the change operation is performed on a field-by-field basis; only those fields which are to be changed need be specified. All others will remain as they are on the file.

The update cards for deletions and changes must be in the same order as the records on the Run File. The Run File is sorted first by ship type, then by hull number, and finally by sequence number. To insure that the update cards are input to UPRUN in this order, they are sorted as part of the run set-up for UPRUN.

The final update operation, the addition of new records to the file, is accomplished through the "add" update card. Add cards may be placed at any point in the update deck; the program places them on a temporary file and, after all change and delete operations have been successfully completed, transfers the added records to the end of the Run File. Note that all fields of an add card should be filled in.

The run set-up for the UPRUN program is in two parts. The first part performs the updates and places the updated version of the file onto a backup file. The original Run File is, at this point, unchanged. The user then has the opportunity to examine the output of UPRUN to determine whether he is satisfied with the results of the update. If he is satisfied, he then runs the second part of the update set-up. This part interchanges the contents of the Run File and the backup file so that the Run File contains the updated version and the backup, the original version. The Run File is then sorted and printed out. If the user was not satisfied with the first part of the update, he merely changes the update cards and re-runs the program with the first run set-up.

Figure 3 presents the hierarchical diagram of the UPRUN program.

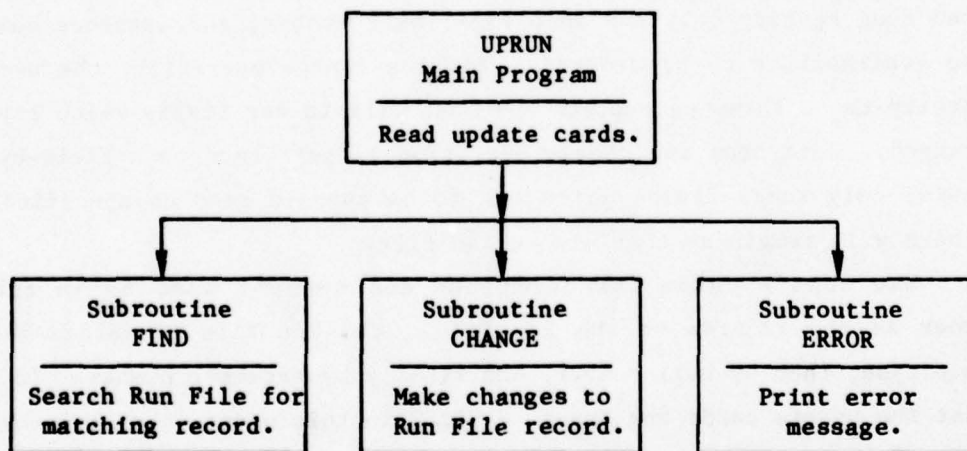


Figure 3 - Hierarchical Diagram of the UPRUN Program

RUN SET-UPS

The following set-ups are used in the updating process:

Part 1 - Update onto backup file.

```
//NVSUPRUN JOB (XXXXXXXXXX,XXXXX),USER,CLASS=C,TIME=(,10),MSGLEVEL=1
//JOB LIB DD DSN=NVS01.MISC.LIB,DISP=SHR

// EXEC SDA                                     (SORT UPDATE CARDS)
//SORTIN DD *



UPRUN CARD INPUTS



//SORTOUT DD DSN=&&CARDS,DISP=(,PASS),UNIT=SYSDA,
// SPACE=(800,100),DCB=(LRECL=80,RECFM=FB,BLKSIZE=800)
//SYSIN DD * (SORT BY SHIP AND SEQUENCE NUMBER)
SORT FIELDS=(1,4,A,6,4,A,33,4,A),FORMAT=CH

// EXEC PGM=UPRUN                                (EXECUTE PROGRAM UPRUN)
//GO.FT06F001 DD SYSOUT=A                        (LIST OF UPDATES PERFORMED)
//GO.FT04F001 DD DSN=&&CARDS,DISP=(OLD,DELETE)    (SORTED UPDATE CARDS)
//GO.FT01F001 DD DSN={LRPS RUN FILE},DISP=SHR     (INPUT FILE)
//GO.FT07F001 DD DSN={BACKUP RUN FILE},DISP=SHR   (OUTPUT FILE)
//GO.FT08F001 DD DSN=&&TEMP,DISP=(NEW,DELETE),UNIT=SYSDA, (I/O FILE)
// SPACE=(840,100),DCB=(LRECL=84,RECFM=FB,BLKSIZE=840)
```

Part 2 - Sort the updated Run File and interchange the contents of the Run File and the backup file.

```
//NVSOKRUN JOB (XXXXXXXXXX,XXXXX),USER,CLASS=C,TIME=(,10),MSGLEVEL=1
//JOB LIB DD DSN=NVS01.MISC.LIB,DISP=SHR

// EXEC PGM=IEBGENER                            (COPY RUN FILE TO TEMP. FILE)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN={RUN FILE},DISP=SHR
//SYSUT2 DD DSN=&&TEMP,DISP=(,PASS),UNIT=SYSDA,
// SPACE=(840,100),DCB=(LRECL=84,RECFM=FB,BLKSIZE=840)

// EXEC SDA                                     (SORT BACKUP RUN FILE ONTO RUN FILE)
//SORTIN DD DSN={BACKUP RUN FILE},DISP=SHR
//SORTOUT DD DSN={RUN FILE},DISP=SHR
//SYSIN DD * (SORT BY SECTOR, SHIP, AND SEQUENCE NUMBER)
SORT FIELDS=(73,2,A,1,9,A,33,4,A),FORMAT=CH

// EXEC PGM=IEBGENER                            (COPY TEMP. FILE TO BACKUP RUN FILE)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN=&&TEMP,DISP=(OLD,DELETE)
//SYSUT2 DD DSN={BACKUP RUN FILE},DISP=SHR

// EXEC PGM=IEBGENER                            (PRINT RUN FILE)
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD DSN={RUN FILE},DISP=SHR
//SYSUT2 DD SYSOUT=A,DCB=BLKSIZE=134
```


INPUT/OUTPUT

The following units are used by the UPRUN program:

- Unit 1 - input - LRPS Run File (for one sector)
- Unit 4 - input - Card inputs giving updates to be performed
- Unit 6 - output - Printout of updates performed
- Unit 7 - output - Updated Run File (unsorted)
- Unit 8 - I/O - Temporary file of new records.

An example of the unit 6 printout is given on page 92.

"UPRUN" CARD INPUT

(Unit 4)

Identification Card

CARD		FIELD CONTENTS		
COLUMN	FORMAT			
1		[Ship type field]		
4				
	"D"			
	"A"			
	"T"			
	"E"			
	":"			
10		Run date		
11	I2			Month
13	"/"			
	I2			Day
16	"/"			
18	I2			Year
	1X			
20	"F"			
	"I"			
	"L"			
	"E"			
24	":"	File number		
25				
	I4			
28				
29		File version		
	A3			
31				
32				
		File name		
.				
.	A18			
.				
49				

Update Cards. An update card is required for every record to be changed, deleted, or added to the Run File. The basic format of the update card is the same as that of the Run File record (with the record number omitted). A code has been added to indicate the type of update operation to be performed. If the update code is "C" (change) or blank, the existing Run File record with the ship type, hull number, and sequence number indicated on the update card is modified. In this case, only the records to be modified need be specified; all others will remain unchanged. If the update code is "D" (delete), the existing Run File record with the ship type, hull number, and sequence number indicated on the update card is deleted from the Run File.

Change and delete update cards must be in the same order as the records on the Run File*, since searching the Run File for a match begins with the next record on the Run File following the one specified by the last deletion or change operation.

If the update code is "A" (add), a new record is added to the Run File (and is placed at the end of the file). Add cards may appear at any point in the update deck. They need not be grouped together.

CARD		FIELD CONTENTS
COLUMN	FORMAT	
1	A4	Ship type
4		
6	1X	Update code ("C" or blank, "D", or "A")
9	I4	Hull number
12		
16	A5	Homeport

*The Run File is sorted first by ship type, then by hull number, and finally by sequence number.

Update Cards (continued)

CARD		FIELD CONTENTS
COLUMN	FORMAT	
17	I2	Month of availability start date
18		
	"/"	
20	I2	Day of availability start date
21		
	"/"	
23	I2	Year of availability start date
24		
25	I2	Month of availability end date
26		
	"/"	
28	I2	Day of availability end date
29		
	"/"	
31	I2	Year of availability end date
32		
33	I4	Sequence number
36	I2	Priority
37		
38	I2	Dock class
39		
40	A1	Inact. marker
41		
42	I2	Labor distribution histogram
43		
44	A5	Overhaul yard
48	I3	Start restraint
49		
51	I3	End restraint
52		
54	I4	Dock time (days)
55		
58	IX	

Update Cards (continued)

CARD COLUMN	FORMAT	FIELD CONTENTS
60		
	I7	Mandays (production shop productive)
66		
67	A3	Type of work
69		
70	A3	Specialization category
72		
73	A1	Yard ownership ("N" or "P")
74	A1	Coast ("E" or "W")
75		
	I3	Percent alterations
77		
	2X	
80	I1	Type select

LRPS RUN FILE

(Unit 1 - "UPRUN" Input and Unit 7 - "UPRUN" Output)

Header Record (First record on the file)

RECORD		FIELD CONTENTS	
POS.	FORMAT		
1			
.			
.	A18	File name	
.			
18			
19			
	I4	File number	
22			
23			
	A3	File version	
25			
26	I2	Month	File creation date
	I2	Day	
	I2	Year	
31			
32			
.			
.	41X		
.			
72			
73	"A"	[Sector]	
74	"A"		
	5X		
80	"0"	[Type Select]	
81	"0"	Record number	
	"0"		
	"0"		
84	"0"		

Availability Records (One per availability)

RECORD POS.	FORMAT	FIELD CONTENTS	
1	A4	Ship type	
4			
6			
9	1X		
12	I4	Hull number	
16			
17			
19	2X		
22	A5	Homeport	
24			
25			
27	I2	Month	Availability start date
30	"/"		
32	I2	Day	
33	"/"		
36	I2	Year	Availability end date
37	I2	Month	
38	"/"		
39	I2	Day	
40	"/"		
41	I2	Year	
42	I4	Sequence number	
43	I2	Priority	
44			
45			
46	I2	Dock class	
47	A1	Inact. marker	

Availability Records (continued)

RECORD	POS.	FORMAT	FIELD CONTENTS		
	42	I2	Labor distribution histogram		
	43				
	44				
		A5	Overhaul yard		
	48	I3	Start restraint		
	49				
	51	I3	End restraint		
	52				
	54	I4	Dock time (days)		
	55				
	58	1X			
	60	I7	Mandays (production shop productive)		
	66	A3	Type of work		
	67				
	69	A3	Specialization category		
	70				
	72	A1	Yard ownership ("N" or "P")	Sector	
	73		Coast ("E" or "W")		
	74	I3	Percent alterations		
	75				
	77	2X			
	80	I1	Type select		
	81				
		I4	Record number		
	84				

Trailer Records (Two records which follow all the availability records)

RECORD POS.	FORMAT	FIELD CONTENTS
1	"E"	
	"N"	
3	"D"	
4	I1	Contains "1" (first trailer record) or "2"
5		
.		.
.	68X	.
.		.
72		
73	"Z"	[Yard ownership indicator]
74	A1	Contains "X" (first trailer record) or "Y"
	5X	
80	"9"	[Type select]
81		
	I4	Record number
84		

Final Record

RECORD		FIELD CONTENTS
POS.	FORMAT	
1	"L"	
	"A"	
	"S"	
4	"T"	
5		
.	32X	.
.		.
.		.
36		
37		
38	"9"	[Priority]
39		
.	34X	.
.		.
.		.
72		
73	"Z"	[Sector]
74	"Z"	
	5X	
80	"9"	[Type select]
	"9"	
	"9"	[Record number]
	"9"	
84	"9"	

LISTING OF PROGRAM

```

C*****PROGRAM UPRUN(INPUT,OUTPUT,TAPE4,      TAPE6=OUTPUT,TAPE1,TAPE7,  **** 10
C****.    TAPE8)                                **** 20
C                                                    UPRU 30
C                                                    UPRU 40
C UPRUN (UPDATE LRPS RUN FILE) IS CAPABLE OF PERFORMING THE FOLLOWING  UPRU 50
C OPERATIONS:                                       UPRU 60
C                                                    UPRU 70
C    - DELETE OR CHANGE PARTICULAR RUN FILE RECORDS.    UPRU 80
C    - ADD NEW RECORDS TO THE RUN FILE.                UPRU 90
C                                                    UPRU 100
C THE FORMAT FOR THE REPLACEMENT CARDS AND NEW-RECORD CARDS IS THE    UPRU 110
C SAME AS THE RUN FILE RECORDS (WITH THE RECORD NUMBER OMITTED).    UPRU 120
C THE CHANGE AND DELETE OPERATIONS ARE PERFORMED FIRST BY MATCHING    UPRU 130
C THE SHIP TYPE, HULL NUMBER, AND SEQUENCE NUMBER INDICATED ON THE    UPRU 140
C UPDATE CARD WITH THE CORRESPONDING RECORD ON THE RUN FILE. THESE    UPRU 150
C CARDS MUST BE IN THE SAME ORDER AS THE RECORDS ON THE RUN FILE    UPRU 160
C (NAMELY, SHIP TYPE, HULL NUMBER, AND SEQUENCE NUMBER). ADDITION    UPRU 170
C UPDATE CARDS MAY BE PLACED ANYWHERE IN THE INPUT DECK.            UPRU 180
C                                                    UPRU 190
C PRINTOUT OF THE PROGRAM CONSISTS OF A LIST OF ALL CHANGES.        UPRU 200
C DELETIONS, AND ADDITIONS AND A NOTATION OF ANY ERRORS ENCOUNTERED.  UPRU 210
C                                                    UPRU 220
C THE FOLLOWING UNITS ARE USED BY THE PROGRAM:          UPRU 230
C                                                    UPRU 240
C    UNIT 1 - INPUT - LRPS RUN FILE (SORTED) FOR ONE SECTOR          UPRU 250
C    UNIT 4 - INPUT - CARD INPUTS (UPDATES TO BE PERFORMED)          UPRU 260
C    UNIT 6 - OUTPUT - PRINTOUT OF UPDATES PERFORMED                 UPRU 270
C    UNIT 7 - OUTPUT - UPDATED RUN FILE (UNSORTED)                   UPRU 280
C    UNIT 8 - I/O - TEMPORARY FILE OF ADDED RECORDS.                 UPRU 290
C                                                    UPRU 300
C PROGRAMMED BY LINDA L. LAMATRICE, DTNSRDC, CODE 187 (JULY 1978).    UPRU 310
C                                                    UPRU 320
C -----                                                    UPRU 330
C                                                    UPRU 340
C    REAL*8      FILEID, FIELD, PROPT, DATA, UNDER                **** 350
C                                                    UPRU 360
C    INTEGER HULLUP                                                UPRU 370
C                                                    UPRU 380
C    DIMENSION UNDER(26), DATA(26), FIELD(26), PROPT(2,5), CARD(21),  UPRU 390
C    .    FILEID(3), DATE(3), FILE(2)                                UPRU 400
C                                                    UPRU 410
C    DATA BLANK/1H /, DEL, CHG, ADD/1HD, 1HC, 1HA/, AST/1H*/,      UPRU 420
C    .    RBLANK/1H /, PROPT/7HDELETE ,7HRECORD:,8HCHANGE -,6H FROM:,  UPRU 430
C    .    1H ,1H ,8H      -.6H-- TO:,8HADD RECO,3HRD:/, IEOF4/0/,    UPRU 440
C    .    IADD/0/, FILE/3HOLD,3HNEW/                                UPRU 450
C                                                    UPRU 460
C -----                                                    UPRU 470
C                                                    UPRU 480
C                                                    UPRU 490
C READ FILE IDENTIFICATION INFORMATION. -----                UPRU 500
C*****CALL ERRSET(NERR,99)                                         **** 510
C    READ (1,100) FILEID,FNUM,FVER,DATE                            UPRU 520
C    100 FORMAT (3A6,A4,A3,3A2,41X,2HAA,5X,5H00000)                UPRU 530
C    WRITE (6,120)                                                  UPRU 540
C    120 FORMAT (1H1)                                              UPRU 550
C    WRITE (6,130) FILE(1),FNUM,FVER,FILEID,DATE                  UPRU 560
C    130 FORMAT (5X,A3,11H RUN FILE: ,A4,A3,1X,3A6,1X,A2,2(1H/,A2)/  UPRU 570
C    .    5X,12(1H-)/)                                            UPRU 580
C    READ (4,140) DATE,FNUM,FVER,FILEID                            UPRU 590
C    140 FORMAT (10X,3A3,5X,A4,A3,3A6)                             UPRU 600
C    WRITE (6,130) FILE(2),FNUM,FVER,FILEID,DATE                  UPRU 610

```

WRITE (6,330)	UPRU 620
WRITE (7,100) FILEID,FNUM,FVER,DATE	UPRU 640
LINE=9	UPRU 650
C	UPRU 660
C READ NEXT UPDATE CARD. -----	UPRU 670
IER=0	UPRU 680
150 DO 160 I=1,22	UPRU 690
160 UNDER(I)=RBLANK	UPRU 700
170 READ (4,180,END=350) FIRST,(FIELD(I),I=1,25)	**** 710
C*170 READ (4,180) FIRST,(FIELD(I),I=1,25)	**** 720
180 FORMAT (A1,T1,A4,1X,A4,2X,A5,2(A2,1X),A2,2(A2,1X),A2,A4,2A2,	UPRU 730
A1,A2,A5,2A3,A4,1X,A7,2A3,2A1,A3,2X,A1)	UPRU 740
C***** IF (EOF(4).NE.0.0) GO TO 350	**** 750
IF (FIRST.EQ.AST) GO TO 170	UPRU 760
BACKSPACE 4	UPRU 770
READ (4,190) SHIPUP,OPER,HULLUP,ISEQUP	UPRU 780
190 FORMAT (A4,A1,I4,T33,I4)	UPRU 790
C	UPRU 800
C OPERATION IS DELETE. -----	UPRU 810
IF (OPER.NE.DEL) GO TO 250	UPRU 820
CALL FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA)	UPRU 830
IF (IER.NE.0) GO TO 410	UPRU 840
200 LINE=LINE+1	UPRU 850
IF (LINE.LT.55) GO TO 210	UPRU 860
LINE=1	UPRU 870
WRITE (6,120)	UPRU 880
210 WRITE (6,220) (PROPT(I,1),I=1,2),DATA	UPRU 890
220 FORMAT (5X,2A8,A4,1X,A4,2X,A5,2(A2,2(1H/,A2)),A4,2A2,A1,A2,A5,	UPRU 900
2A3,A4,1X,A7,2A3,2A1,A3,2X,A1,A4)	UPRU 910
WRITE (6,330)	UPRU 920
LINE=LINE+2	UPRU 930
GO TO 170	UPRU 940
C	UPRU 950
C OPERATION IS CHANGE. -----	UPRU 960
250 IF (OPER.EQ.ADD) GO TO 300	UPRU 970
CALL FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA)	UPRU 980
IF (IER.NE.0) GO TO 410	UPRU 990
WRITE (6,330)	UPRU1000
IF (LINE.LT.53) GO TO 270	UPRU1010
LINE=5	UPRU1020
WRITE (6,120)	UPRU1030
270 WRITE (6,220) (PROPT(I,2),I=1,2),DATA	UPRU1040
CALL CHANGE(0,DATA,FIELD,UNDER)	UPRU1050
WRITE (6,275) (PROPT(I,3),I=1,2),UNDER	UPRU1060
275 FORMAT(5X,2A8,A4,1X,A4,2X,A5,2(A2,1X),A2,2(A2,1X),A2,A4,2A2,	UPRU1070
A1,A2,A5,2A3,A4,1X,A7,2A3,2A1,A3,2X,A1,A4)	UPRU1080
WRITE (6,220) (PROPT(I,4),I=1,2),DATA	UPRU1090
WRITE (6,330)	UPRU1100
LINE=LINE+5	UPRU1110
GO TO 150	UPRU1120
C	UPRU1130
C OPERATION IS ADD. -----	UPRU1140
300 CALL CHANGE(1,DATA,FIELD,UNDER)	UPRU1150
IADD=1	UPRU1160
IF (LINE.LT.58) GO TO 320	UPRU1170
LINE=0	UPRU1180
WRITE (6,120)	UPRU1190
320 WRITE (6,220) (PROPT(I,5),I=1,2),DATA	UPRU1200
WRITE (6,330)	UPRU1210
330 FORMAT (1X)	UPRU1220
LINE=LINE+2	UPRU1230
GO TO 170	UPRU1240
C	UPRU1250

WRITE (6,330)	UPRU 620
WRITE (7,100) FILEID,FNUM,FVER,DATE	UPRU 640
LINE=9	UPRU 650
C	UPRU 660
C READ NEXT UPDATE CARD. -----	UPRU 670
IER=0	UPRU 680
150 DO 160 I=1,22	UPRU 690
160 UNDER(I)=RBLANK	UPRU 700
170 READ (4,180,END=350) FIRST,(FIELD(I),I=1,25)	**** 710
C*170 READ (4,180) FIRST,(FIELD(I),I=1,25)	**** 720
180 FORMAT (A1,T1,A4,1X,A4,2X,A5,2(A2,1X),A2,2(A2,1X),A2,A4,2A2,	UPRU 730
A1,A2,A5,2A3,A4,1X,A7,2A3,2A1,A3,2X,A1)	UPRU 740
C*****IF (EOF(4).NE.0.0) GO TO 350	**** 750
IF (FIRST.EQ.AST) GO TO 170	UPRU 760
BACKSPACE 4	UPRU 770
READ (4,190) SHIPUP,OPER,HULLUP,ISEQU	UPRU 780
190 FORMAT (A4,A1,I4,T33,I4)	UPRU 790
C	UPRU 800
C OPERATION IS DELETE. -----	UPRU 810
IF (OPER.NE.DEL) GO TO 250	UPRU 820
CALL FIND(SHIPUP,HULLUP,ISEQU,IER,DATA)	UPRU 830
IF (IER.NE.0) GO TO 410	UPRU 840
200 LINE=LINE+1	UPRU 850
IF (LINE.LT.55) GO TO 210	UPRU 860
LINE=1	UPRU 870
WRITE (6,120)	UPRU 880
210 WRITE (6,220) (PROPT(I,1),I=1,2),DATA	UPRU 890
220 FORMAT (5X,2A8,A4,1X,A4,2X,A5,2(A2,2(1H/,A2)),A4,2A2,A1,A2,A5,	UPRU 900
2A3,A4,1X,A7,2A3,2A1,A3,2X,A1,A4)	UPRU 910
WRITE (6,330)	UPRU 920
LINE=LINE+2	UPRU 930
GO TO 170	UPRU 940
C	UPRU 950
C OPERATION IS CHANGE. -----	UPRU 960
250 IF (OPER.EQ.ADD) GO TO 300	UPRU 970
CALL FIND(SHIPUP,HULLUP,ISEQU,IER,DATA)	UPRU 980
IF (IER.NE.0) GO TO 410	UPRU 990
WRITE (6,330)	UPRU1000
IF (LINE.LT.53) GO TO 270	UPRU1010
LINE=5	UPRU1020
WRITE (6,120)	UPRU1030
270 WRITE (6,220) (PROPT(I,2),I=1,2),DATA	UPRU1040
CALL CHANGE(0,DATA,FIELD,UNDER)	UPRU1050
WRITE (6,275) (PROPT(I,3),I=1,2),UNDER	UPRU1060
275 FORMAT(5X,2A8,A4,1X,A4,2X,A5,2(A2,1X),A2,2(A2,1X),A2,A4,2A2,	UPRU1070
A1,A2,A5,2A3,A4,1X,A7,2A3,2A1,A3,2X,A1,A4)	UPRU1080
WRITE (6,220) (PROPT(I,4),I=1,2),DATA	UPRU1090
WRITE (6,330)	UPRU1100
LINE=LINE+5	UPRU1110
GO TO 150	UPRU1120
C	UPRU1130
C OPERATION IS ADD. -----	UPRU1140
300 CALL CHANGE(1,DATA,FIELD,UNDER)	UPRU1150
IADD=1	UPRU1160
IF (LINE.LT.58) GO TO 320	UPRU1170
LINE=0	UPRU1180
WRITE (6,120)	UPRU1190
320 WRITE (6,220) (PROPT(I,5),I=1,2),DATA	UPRU1200
WRITE (6,330)	UPRU1210
330 FORMAT (1X)	UPRU1220
LINE=LINE+2	UPRU1230
GO TO 170	UPRU1240
C	UPRU1250

```

C TRANSFER NEW RECORDS TO RUN FILE. -----
350 IER=1
    CALL FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA)
    IF (IADD.EQ.0) STOP
    REWIND 8
360 READ (8,370,END=420) CARD
C*360 READ (8,370) CARD
370 FORMAT (21A4)
C*****IF (EOF(8).NE.0.0) GO TO 420
    WRITE (7,370) CARD
    GO TO 360

C
C PROCESS ERRORS. -----
410 CALL ERROR(LINE,OPER,SHIPUP,HULLUP,ISEQUP)
420 STOP
END

```

```

UPRU1260
UPRU1270
UPRU1280
UPRU1290
UPRU1300
****1310
****1320
UPRU1330
****1340
UPRU1350
UPRU1360
UPRU1370
UPRU1380
UPRU1390
UPRU1400
UPRU1410

```


DATA(26)=RBLANK	CHAN 640
J=8	CHAN 650
C	CHAN 660
C WRITE NEW RUN FILE RECORD. -----	CHAN 670
150 WRITE (J,160) DATA	CHAN 680
160 FORMAT (A4,1X,A4,2X,A5,2(A2,2(1H/,A2)),A4,2A2,A1,A2,A5,	CHAN 690
2A3,A4,1X,A7,2A3,2A1,A3,2X,A1,A4)	CHAN 700
RETURN	CHAN 710
END	CHAN 720

SUBROUTINE ERROR(LINE,OPER,SHIPUP,HULLUP,ISEQUP)	ERRO 10
C	ERRO 20
C	ERRO 30
C SUBROUTINE ERROR IS CALLED WHEN THERE IS NO-MATCH ON THE CURRENT	ERRO 40
C AVAILABILITY. ERROR PRINTS A MESSAGE DESCRIBING THE ERROR.	ERRO 50
C	ERRO 60
C	ERRO 70
INTEGER HULLUP	ERRO 80
C	ERRO 90
DIMENSION DATA(20)	ERRO 100
C	ERRO 110
DATA AST/1H*/	ERRO 120
C	ERRO 130
C -----	ERRO 140
C	ERRO 150
IF (LINE.LT.51) GO TO 110	ERRO 160
LINE=0	ERRO 170
WRITE (6,100)	ERRO 180
100 FORMAT (1H1)	ERRO 190
110 LINE=LINE+5	ERRO 200
WRITE (6,120)	ERRO 210
120 FORMAT (5X,92A1)	ERRO 220
WRITE (6,120) (AST,I=1,92),AST	ERRO 230
WRITE (6,140) OPER,SHIPUP,HULLUP,ISEQUP	ERRO 240
140 FORMAT (5X,40H* NO-MATCH ON RUN FILE FOR AVAILABILITY,	ERRO 250
33H INDICATED BY THIS UPDATE CARD: ,A1,3H - ,A4,2I4/5X,1H*/	ERRO 260
5X,46H* REMAINING UPDATE CARDS CANNOT BE PROCESSED:/5X,1H*)	ERRO 270
150 READ (4,155,END=190) DATA	**** 280
C*150 READ (4,155) DATA	**** 290
155 FORMAT (20A4)	ERRO 300
C*****IF (EOF(4).NE.0.0) GO TO 190	**** 310
160 IF (LINE.LT.58) GO TO 165	ERRO 320
WRITE (6,100)	ERRO 330
LINE=0	ERRO 340
165 WRITE (6,170) DATA	ERRO 350
170 FORMAT (5X,1H*,5X,20A4)	ERRO 360
LINE=LINE+1	ERRO 370
GO TO 150	ERRO 380
C	ERRO 390
190 WRITE (6,120) (AST,I=1,92)	ERRO 400
WRITE (6,200)	ERRO 410
200 FORMAT (1H0)	ERRO 420
LINE=LINE+3	ERRO 430
RETURN	ERRO 440
END	ERRO 450

SUBROUTINE FIND(SHIPUP,HULLUP,ISEQUP,IER,DATA)	FIND 10
C	FIND 20
C	FIND 30
C SUBROUTINE FIND READS RECORDS FROM UNIT 1 AND COPIES THEM ONTO UNIT 7	FIND 40
C UNTIL A MATCH IS MADE ON SHIP TYPE (SHIPUP), HULL NUMBER (HULLUP), AND	FIND 50
C SEQUENCE NUMBER (ISEQUP). THE DATA FROM THE MATCHING RECORD IS	FIND 60
C RETURNED THROUGH THE DATA ARRAY.	FIND 70
C	FIND 80
C IF AN END-OF-FILE IS ENCOUNTERED ON UNIT 7 BEFORE A MATCH IS FOUND,	FIND 100
C IER IS SET TO 1.	FIND 110
C	FIND 120
C	FIND 130
REAL*8 DATA	**** 140
C	FIND 150
INTEGER HULLUP	FIND 160
C	FIND 170
DIMENSION DATA(26)	FIND 180
C	FIND 190
C -----	FIND 200
C	FIND 210
100 READ (1,110,END=150) DATA,SHIP,IHULL,ISEQ	**** 220
C*100 READ (1,110) DATA,SHIP,IHULL,ISEQ	**** 230
110 FORMAT (A4,1X,A4,2X,A5,2(A2,2(1H/,A2)),A4,2A2,	FIND 240
A1,A2,A5,2A3,A4,1X,A7,2A3,2A1,A3,2X,A1,A4,	FIND 250
T1,A4,1X,I4,23X,I4)	FIND 260
C*****IF (EOF(1).NE.0.0) GO TO 150	**** 270
IF (IER.EQ.1) GO TO 120	FIND 280
IF (SHIP.EQ.SHIPUP .AND. IHULL.EQ.HULLUP .AND. ISEQ.EQ.ISEQUP)	FIND 290
RETURN	FIND 300
120 WRITE (7,110) DATA	FIND 310
GO TO 100	FIND 320
C	FIND 330
150 IER=1	FIND 340
RETURN	FIND 350
END	FIND 360

SAMPLE RUN

The sample run of the UPRUN program uses, as its input file, the sorted NE Run File produced by the LRPSCF program. A listing of this file is given on page 36. This section provides listings of all other input/output units used in the sample run of UPRUN.

Card Input (unsorted)

```
DATE: 7/27/78 FILE: 0102 LRPS RUN FILE
-----NORVA-----
CGN A 37 NORVA10/01/7912/01/79 5 1 0 1NORVA 0 0 0 12000RA AANNE 12 1
CGN D 39 3
CGN D 40 3
CGN D 41 3
CV C 62 10 12 41
-----SNEWS-----
CGN C 40 NORVA 2 5000
CGN A 39 NORVA09/01/8211/01/83 10 1 0 13NORVA 3275 80 275000RO AANNE 22 1
CGN 41 NORVA 2
```

Unit 4 - Card Input (sorted)

```
DATE: 7/27/78 FILE: 0102 LRPS RUN FILE
-----NORVA-----
-----SNEWS-----
CGN A 37 NORVA10/01/7912/01/79 5 1 0 1NORVA 0 0 0 12000RA AANNE 12 1
CGN D 39 3
CGN A 39 NORVA09/01/8211/01/83 10 1 0 13NORVA 3275 80 275000RO AANNE 22 1
CGN C 40 NORVA 2 5000
CGN D 40 3
CGN 41 NORVA 2
CGN D 41 3
CV C 62 10 12 41
```


Unit 6 - Printed Output

```

OLD RUN FILE: 0101 LRPS RUN FILE 07/22/78
-----
NEW RUN FILE: 0102 LRPS RUN FILE 7/27/78
-----

ADD RECORD: CGN 37 NORVA10/01/7912/01/79 5 1 0 1NORVA 0 0 0 12000RA AANNE 12 1
DELETE RECORD: CGN 39 NORVA 6/26/7810/25/78 3 1 0 1NORVA 3 85 15 35000PS AANNE 0 1
ADD RECORD: CGN 39 NORVA09/01/8211/01/83 10 1 0 13NORVA 3275 80 275000RO AANNE 22 1

CHANGE - FROM: CGN 40 D 05 11/ 6/78 1/ 5/79 2 1 0 1SNEWS 3 33 20 6000FO AANNE 0 1
      --- TO: CGN 40 NORVA11/ 6/78 1/ 5/79 2 1 0 1SNEWS 3 33 20 5000FO AANNE 0 1
DELETE RECORD: CGN 40 NORVA 7/16/7911/16/79 3 1 0 1NORVA 3 86 15 45000PS AANNE 0 1

CHANGE - FROM: CGN 41 D 05 3/17/80 5/16/80 2 1 0 1SNEWS 3 29 20 5000FO AANNE 0 1
      --- TO: CGN 41 NORVA 3/17/80 5/16/80 2 1 0 1SNEWS 3 29 20 5000FO AANNE 0 1
DELETE RECORD: CGN 41 NORVA12/15/80 3/20/81 3 1 0 1NORVA 3 69 15 45000PS AANNE 0 1

CHANGE - FROM: CV 62 NORVA 9/ 1/7911/26/79 41 1 0 17NORVA 0 0 0 69170RA CVANE 42 1
      --- TO: CV 62 NORVA10/ 1/7912/26/79 41 1 0 17NORVA 0 0 0 69170RA CVANE 42 1

```

Unit 7 (output) - Updated LRPS Run File, NE (unsorted)

LRPS	RUN	FILE	0102	72778						AA	00010
CGN	37	NORVA 1/ 2/81 3/ 5/82	10	1 0	13NORVA	3279	80	278000RO	AANNE	14	1
CGN	38	NORVA 8/ 3/7910/ 2/79	4	1 0	1NORVA	0 0	0	12000RA	AANNE	32	1
CGN	38	NORVA 7/ 1/82 9/ 2/83	10	1 0	13NORVA	3278	80	278000RO	AANNE	9	1
CGN	40	NORVA11/ 6/78 1/ 5/79	2	1 0	1SNEWS	3 33	20	5000FO	AANNE	0	1
CGN	40	CHASN 5/ 1/82 7/ 1/82	4	1 0	1CHASN	0 0	0	12000RA	AANNE	100	1
CGN	41	NORVA 3/17/80 5/16/80	2	1 0	1SNEWS	3 29	20	5000FO	AANNE	0	1
CV	59	NORVA 5/ 3/80 7/29/80	42	1 0	17NORVA	0 0	0	60000RA	CVANE	43	1
CV	59	NORVA10/ 1/81 1/ 1/82	43	1 0	17NORVA	0 0	0	60000RA	CVANE	44	1
CV	60	MAYPT 4/20/7912/ 1/79	60	1 0	23NORVA	3100	80	240000RO	CVANE	47	1
CV	62	NORVA11/21/7710/19/78	40	1 0	23NORVA	3178	100	346352RO	CVANE	41	1
CV	62	NORVA10/ 1/7912/26/79	41	1 0	17NORVA	0 0	0	69170RA	CVANE	42	1
END1									ZX		9
END2									ZY		9
LAST				9					ZZ		99999
CGN	37	NORVA10/01/7912/01/79	5	1 0	1NORVA	0 0	0	12000RA	AANNE	12	1
CGN	39	NORVA09/01/8211/01/83	10	1 0	13NORVA	3275	80	275000RO	AANNE	22	1

Unit 8 (input/output) - Temporary File of New Records

CGN	37	NORVA10/01/7912/01/79	5	1 0	1NORVA	0 0	0	12000RA	AANNE	12	1
CGN	39	NORVA09/01/8211/01/83	10	1 0	13NORVA	3275	80	275000RO	AANNE	22	1

Sorted LRPS Run File, NE

LRPS	RUN	FILE	0102	72778						AA	00010
CGN	37	NORVA10/01/7912/01/79	5	1 0	1NORVA	0 0	0	12000RA	AANNE	12	1
C N	37	NORVA 1/ 2/81 3/ 5/82	10	1 0	13NORVA	3279	80	278000RO	AANNE	14	1
3N	38	NORVA 8/ 3/7910/ 2/79	4	1 0	1NORVA	0 0	0	12000RA	AANNE	32	1
CGN	38	NORVA 7/ 1/82 9/ 2/83	10	1 0	13NORVA	3278	80	278000RO	AANNE	9	1
CGN	39	NORVA09/01/8211/01/83	10	1 0	13NORVA	3275	80	275000RO	AANNE	22	1
CGN	40	NORVA11/ 6/78 1/ 5/79	2	1 0	1SNEWS	3 33	20	5000FO	AANNE	0	1
CGN	40	CHASN 5/ 1/82 7/ 1/82	4	1 0	1CHASN	0 0	0	12000RA	AANNE	100	1
CGN	41	NORVA 3/17/80 5/16/80	2	1 0	1SNEWS	3 29	20	5000FO	AANNE	0	1
CV	59	NORVA 5/ 3/80 7/29/80	42	1 0	17NORVA	0 0	0	60000RA	CVANE	43	1
CV	59	NORVA10/ 1/81 1/ 1/82	43	1 0	17NORVA	0 0	0	60000RA	CVANE	44	1
CV	60	MAYPT 4/20/7912/ 1/79	60	1 0	23NORVA	3100	80	240000RO	CVANE	47	1
CV	62	NORVA11/21/7710/19/78	40	1 0	23NORVA	3178	100	346352RO	CVANE	41	1
CV	62	NORVA10/ 1/7912/26/79	41	1 0	17NORVA	0 0	0	69170RA	CVANE	42	1
END1									ZX		9
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